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Patterns of Drug Use and Their Relation to Improving
Prediction of Patterns of Delinquency and Crime

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Chapter 1

THINKING ABOUT THE DRUG/CRIME NEXUS

Introduction

Like many other scientific enterprises, we hope that looking backward will take us forward. We have been concerned about the world of work and the world of delinquency and crime for many years but not in the oversimplified way that has characterized the stance of the religious who saw delinquency and/or crime as the product of idleness--"the devil has work for idle hands"--or as the sociologist who saw delinquency and/or crime as the consequence of unemployment (poverty and dependency produces social pathology). We have come to see most delinquency as a form of leisure time activity, some delinquency and crime as a type of career activity that develops in certain settings just as legitimate careers develop in other settings, and sometimes either or both delinquency and crime as a reaction to one's perception of a hostile society which provides some persons with little hope for attaining the statuses that make life satisfying. Not all delinquency and not all crime will fit into these categories but this has been our general orientation.

As a corollary we take the position that delinquency and crime are products of various chains of life experiences rather than the product of defective genes or mental aberrations. Rather than types of people there are chains of life experiences within social settings which lead to delinquent and criminal behavior. In order to understand delinquency and crime these must be identified through research in the community rather than organically or physiologically oriented clinical research.

This is not the place to review either our cross-sectional, constructed cohort, or birth cohort research on the relationship of juvenile delinquency to adult crime. Let it suffice to say that we have never been satisfied with the extent to which we have increased predictive efficiency from juvenile to adult careers with official, self-report, or interview data over the modal category of the marginals, chance, or in relation to that which is possible based on marginal distributions. Looking backward, what aspects of social settings have we overlooked, what chains of experiences have we failed to encapsulate in past efforts to predict the future from the past?

Perhaps the error is in assuming that accurate prediction from past to future can be obtained based on an oversimplified theoretical perspective. Remember, the functions of science are to enable us to understand, predict, and control. If we commence without some idea of the connection between a set

of independent, antecedent, explanatory variables and the dependent or set of related dependent variables, or with too narrow an explanatory framework, too narrow a theoretical perspective, we will perhaps: 1) overlook the range of variables which are explanatory, 2) base our predictive effort on the use of variables which are correlated with what we wish to predict but are not antecedent or, 3) if they are antecedent, they are not the crucial, not the necessary and sufficient antecedents.

At a different level, well-meaning people wish to commence with "control" without much knowledge about the nature, extent, and "causes" of the phenomenon to be controlled. The simplest correlations between the behavior to be controlled and some other behavior is to them evidence of predictability and maybe even "causation." Their next step is to show that the two variables have a statistically significant relationship, which still means nothing. Rejection of the null hypothesis is taken as evidence that their hypotheses and the theoretical position that they have taken has been supported by scientific research.

All of this may seem sophomoric to some but the state of the art as represented by the literature suggests that those who have made many attempts to determine the relationship of delinquency to crime or to predict career continuity have not thought about the problem within a testable theoretical framework. Our look back after many years of cohort research on the relationship of juvenile delinquency to adult crime brings us to our current research concern. Does the nexus between drugs and/or alcohol and delinquency and/or crime enable us to better understand the development of these behaviors and to predict continuity in delinquency and crime with fewer positive and negative errors than did our previous attempts?

We had already determined that the interrelationship of substance use/offenses and delinquency and/or crime was indeed complex in the course of our National Institute of Justice funded project 85-IJ-CX-0019, "Prediction and Typology Development." To that time it was our most comprehensive attempt to increase predictive efficiency through multivariate analyses. As an introduction to our current research it seems incumbent upon us to re-examine the entire body of Racine cohort data and to summarize what it tells us about crime and drugs. Having done this, we will be prepared to utilize the recoded and up-dated 1955 Cohort data (recoded to facilitate analysis of the interrelationships that we have just touched upon) in the development of a

prediction device with fewer false positives and fewer false negatives than had been obtained in earlier juvenile to adult attempts at prediction.

What We Know from the Literature About Drugs, Delinquency, and Crime

Contemporary research and media attention to the problems of drugs and delinquency/crime, both fascinating and provocative, suggest drug and delinquency/crime ties similar to the alcohol and delinquency/crime ties which were of concern in the 1920s and early 1930s. As a consequence, some persons in positions of authority are eager to seize upon evidence of drug use among delinquents and criminals as the key to a successful attack on crime. Cautious researchers take a more responsible position.

White, Pandina, and LaGrange (1987), among others, have appropriately recognized the error in jumping from the existence of a statistically significant relationship between variables (drugs and crime) to the assumption that one is antecedent to and perhaps explanatory of the other. Early and continued involvement with alcohol and/or drugs may be a significant correlate of other delinquent involvement but is neither explanatory nor an efficient predictor of future delinquent and criminal behavior. Furthermore, White, et al., indicate an awareness of the complexity of alcohol, drugs, and delinquency relationships, pointing out in reference to their own research that "The results indicate that serious alcohol use, drug use, and delinquency are not necessarily concentrated in a homogeneous grouping of adolescents, but rather that each group represents a somewhat unique set of individuals whose dynamic processes are qualitatively distinct." (p. 736).

The existence of a serious drug problem has for some time been recognized in Eastern, Western, and other major metropolitan areas, but some people have, until recently, believed that it is not a major concern in the upper Midwest, even in its largest urban areas. One can understand this considering that as late as 1985 only 9.1% of the male first admissions (7.8% female) to Wisconsin Adult Correctional Institutions were regarded solely as drug offenders. Drug offenders made up only 5.0% of the male (13.2% female) readmissions. Unfortunately, these figures failed to tell us how many offenders of other types were also drug users/offenders.

Be that as it may, the drug war in its most violent form may now be found in middle sized cities (circa 100,000) such as Racine, Wisconsin. Four pages from The Journal Times, Feb. 1-4, illustrate the violence of recent years, only a relatively few years after we and others had announced that Racine had



the Journal Times

the Journal Times

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WEDNESDAY, FEBRUARY 11, 1989

Special Report: THE DRUG WAR

Drug traffic grows despite enforcement push

By Laura J. Morisano Journal Times
The drug war in Illinois is far from over, despite a recent enforcement push...



Coke dealers thrive by intimidation, fear

By Laura J. Morisano Journal Times
Cocaine dealers in Illinois are thriving by intimidation and fear...

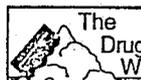


Calls, tips build a case

By Laura J. Morisano Journal Times
Calls and tips from the public have helped build a case...

Drug ring relies on intimidation

By Laura J. Morisano Journal Times
Cocaine dealers thrive by fear, violence and death...



4A: State, federal agents ready to help

In addition to the three dead men, six other Racine men have been injured by gunfire in a drug feud...



Drug war death

The body of Joseph Harris III, 26, of 851 Washington St., was shot in the back of the head...

Drug ring relies on intimidation

By Laura J. Morisano Journal Times
Cocaine dealers thrive by fear, violence and death...

Many fear gangs' trend into drugs

By Laura J. Morisano Journal Times
Many fear gangs' trend into drugs...

More kids do drugs if they are jobless

By Laura J. Morisano Journal Times
More kids do drugs if they are jobless...

Peppia facing criminal charges in connection with Racine's drug war

Peppia facing criminal charges in connection with Racine's drug war...

City men arrested in Illinois

By Laura J. Morisano Journal Times
Two Racine men, including one wanted on a charge of attempted murder...



Charles Dent, suspect in shooting



Ivy Tucker, head on \$100,000 bond

Special Report: THE DRUG WAR

Many fear gangs' trend into drugs

By Laura J. Morisano Journal Times
Many fear gangs' trend into drugs...

More kids do drugs if they are jobless

By Laura J. Morisano Journal Times
More kids do drugs if they are jobless...



Portrait of a man in a suit

Dealers seen as problem

By Laura J. Morisano Journal Times
Dealers seen as problem...

More kids do drugs if they are jobless

By Laura J. Morisano Journal Times
More kids do drugs if they are jobless...

Money lures young into selling drugs

By Sara Lamb Journal Times
A teenager wearing a beeper pulled awad of money out of his pants and flipped through the bills...

Special Report: THE DRUG WAR

Dealers seen as problem

By Laura J. Morisano Journal Times
Dealers seen as problem...

More kids do drugs if they are jobless

By Laura J. Morisano Journal Times
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Peppia facing criminal charges in connection with Racine's drug war

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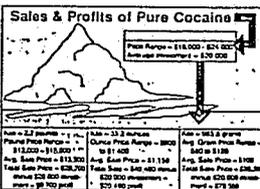
Peppia facing criminal charges in connection with Racine's drug war

Peppia facing criminal charges in connection with Racine's drug war...

Special Report: THE DRUG WAR

Huge profits lure dealers in cocaine

By Gary Metro Journal Times
The drug war in Racine is a vicious one...



Gang link detected in drug trafficking

By Gary Metro Journal Times
Automatic weapons, electronic pagers, luxury cars and layers of gold jewelry — these are the trappings of the cocaine trade.

certain about the gang involvement in cocaine trafficking, murder and terror. But they are also quick to say it's difficult to penetrate the secrecy of a gang...

4A: Cocaine deals mean big money Counselors: Drugs are out of control

They're a murderous mafia to some who fear their physical and financial power may be spreading to Racine's Vice Lords and Disciples gangs. But they're called a bunch of punks by some authorities...



FRIDAY — Racine gangs once battled for turf, but they seem now to be concentrating on making money in the lucrative but deadly cocaine trade.

SATURDAY — Law-abiding citizens who have lived peacefully for years now say they are afraid to leave their homes in neighborhoods where drug-related shootings have left three men dead and six injured.

SUNDAY — Racine's ongoing drug war is a battle between black drug-dealing factions, according to police. But they also say the illicit drug trade transcends racial lines.



Jessie Howard of Taylor Home offers some thoughts. Problem is 'much worse'

By Gary Metro Journal Times
The drug war in Racine is a vicious one...

Gangs

By Gary Metro Journal Times
The drug war in Racine is a vicious one...

Taylor Home supervisor: Problem is 'much worse'

By Gary Metro Journal Times
The drug war in Racine is a vicious one...

How to v

By Gary Metro Journal Times
The drug war in Racine is a vicious one...

Journal Times

WISCONSIN SATURDAY, FEBRUARY 4, 1989

Special Report: THE DRUG WAR



Business as usual, until it gets dark

By Gary Metro Journal Times
The drug war in Racine is a vicious one...



Businesswoman Carolyn Ross and son Brandon.

Neighbors become drug war's new victims. Rev. Lee Finley: 'A kind of hurts sometimes to be labeled a bad area.'

A neighborhood cringes in the night

Confrontation on 11th Street



Shooting, drug trade put 11th Street and Irving Place in dangerous straits.

One sold home sends a block into tailspin

By Gary Metro Journal Times
The drug war in Racine is a vicious one...

Drugs destroy normal lives

By Gary Metro Journal Times
The victims of gangs and drugs in Racine are not only the addicts...

6A: Shootings, drug deals have people scared

By Gary Metro Journal Times
The drug war in Racine is a vicious one...



By Gary Metro Journal Times
The drug war in Racine is a vicious one...

little in the way of organized, violent crime and relatively few violent criminals.

Although there is an extensive literature on drugs and crime, much of it is not transferable to the more general problem of the role of drugs in continuities in delinquency and crime in the larger society. Studies of incarcerated offenders (Chaiken and Chaiken, 1982) are valuable but insufficient for an accurate estimate of the nature and extent of the wider problem of drugs outside the prison and, for that matter, outside the inner city. Similarly, studies of changes in behavior during addicted vs. non-addicted periods (Ball, Schaffer, and Nurco, 1983 and Anglin and Speckart, 1986) are important but are only the beginning shots in the barrage of studies which must be conducted in order to lay the groundwork for what might be termed a sophisticated war on drugs.

Watters, Reinerman, and Fagan (1985) have reviewed the literature that points toward the "drugs-cause-crime" position, concluding that it must be rejected. It is easy to see how the "drugs cause crime" conclusion could be reached by examination of institutionalized offenders who, by reason of their position in society, are likely to have early on been introduced to drugs. It is almost equally certain that people arrested in certain places at certain times are also likely to be drug users. And, as McGlothlin, Anglin, and Wilson (1978) have concluded, during periods of addiction some commit more crimes and are more likely to be arrested for them. This, too, is not surprising because offenses by persons under the influence may be more visible than similar offenses by persons who are not under the influence of alcohol and/or drugs. Furthermore, as Johnson and Wish (1987) stated, a large share of known offenders will have spent the profits from crime on more drugs within six hours. It has been pictured as such a vicious circle in major metropolitan areas that it is no wonder the general public has come to define the drug/delinquency/crime problem as one of paramount importance.

The "crimes cause drug use" hypothesis has been no better confirmed even though reliable researchers (Elliott and Ageton [1981]) supported this position at an earlier period. It is not surprising that in the end, Watters, Reinerman, and Fagan (1985) and others have turned to the "common-cause" position in accounting for the link between drugs and crime. Wish and Johnson (1986) concluded that determining the exact sequence of the onset of drug use and criminal behavior is a futile and perhaps trivial pursuit, whether drugs came first or after probably being a function of opportunity and other social factors. While they have a point, and almost anyone who has been close to the

drug scene since the 1960s would agree, what sociologists should be concerned about is process, as represented by a chain of events or an experiential chain, as it has been put.

To an extent, the correlation of drugs and delinquency/crime is spurious, the result of similar etiological links to a common antecedent. This position has more recently been supported by Elliott and Huizinga (1984) and White, Pandina, and LaGrange (1987). The latter make the crucial point that, although a majority of the serious delinquents are also serious substance abusers, only one-third of the serious users are also serious delinquents. A complete understanding of the process must also recognize its complexity and the role of alcohol in heroin abuse as described by Strug, Wish, Johnson, Anderson, et al. (1984). A number of studies throughout the nation have shown that if the population sample consists of older juveniles and young adults who, upon arrest, are brought into a metropolitan precinct station, there is a good probability that they are also drug users and will test that way. However undesirable this state of affairs may be, however much it may point to drugs as either the culprit or its corollary, we must proceed with caution.

Let us assume, for example, that Diagram 1 is a good model with which to commence. Even if 90% of those who have been arrested during the hours from 4 PM to Midnight, or any other time for that matter, test positive for drugs, does this tell us much about the crime/drugs nexus? Only a small percent of the population is at best represented by those who are arrested. That we should stop with information for two of the cells in the model (50 persons consisting of 5% of the population of 1000), as there has been a tendency to do, prevents us from obtaining the data that are necessary if we are to even begin to test the hypothesis that drugs cause crime or that crime is the forerunner of drugs or any other hypotheses about some causal crime/drug relationship.

Should the members of a cohort or a cross-section of the population turn out to be distributed as shown in this model, or any other model for that matter, the next step is to examine everyone's official record and conduct interviews which elicit accounts of behavior which is antecedent to the status of persons at that instant in the model, and its relationship, if any, to behavior that follows in time, i.e., the chain of events. The question is how do drug behavior and delinquent or criminal behavior come about in a given milieu, more specifically, in one type of milieu as compared with another? What is the role of the police and do surveillance practices net persons who are more likely to be on drugs than are others? Perhaps this is not the best

DIAGRAM 1. HYPOTHESIZED DISTRIBUTION OF DRUG TEST OUTCOME BY RESIDENCE, ARREST, SELF-REPORTED OR OFFICIAL STATUS AS OFFENDER (OTHER THAN DRUGS)

	<u>Inner City Neighborhoods</u>			<u>Other Neighborhoods</u>		
	Arrested	Offenders On Streets Not Arrested	Non-Offenders On Streets	Arrested	Offenders On Streets Not Arrested	Non-Offenders On Streets
Drug Test						
Negative	10%	30%	50%	50%	75%	90%
Positive	90%	70%	50%	50%	25%	10%
Percent	100%	100%	100%	100%	100%	100%

Drug Test

Negative	5	60	125	15	75	333 (613)
Positive	45	140	125	15	25	37 (387)
Number	50	200	250	30	100	370 (1000)

Drug Test

Negative	.8%	9.8%	20.4%	2.4%	12.2%	53.4% (99.9%)
Positive	11.6%	36.2%	32.3%	3.9%	6.4%	9.6% (100.0%)

model, it may be oversimplified, but any model which hopes to get at understanding the crime/drug nexus must include enough people of different experience types to make rejection of the favored explanation possible. If this type of model has been tested, we have yet to see it.

Our findings have been consistent with those of Elliott, Huizinga, and Ageton (1985) and Orcutt (1987) who have found strong support for the influence of associates. In the same vein, Johnson, Marcos, and Bahr (1986) have not only shown that drug using peers are the best predictor of drug use but that variables from the social learning tradition have the strongest effects in a model which accounts for 49% of adolescent drug use. These findings, however, are of limited use to persons on the firing line because they apply only to the process of involvement in an on-going system with a subculture of drug use. Explaining the development and growth of the system and the drug subculture is another matter.

It is also likely that studies based on samples from subsocieties in Harlem or East Los Angeles may not be applicable to an understanding of the broader problem of alcohol, drugs, and crime throughout the United States, though they are important in sensitizing us to the problem's extremes and its indirect as well as direct costs. In sections of New York where more people organize their lives around drugs than they do in most other metropolitan areas, the immediate or direct cost to the public of drug-related crime may not be as great as the media indicate--nor may the rewards to offenders be as great as assumed (Johnson and Wish, 1987). Long-term drug care and policing costs are the real costs that must not be underestimated. The costs of dealing with an increasing proportion of youth who are involved is probably greater than the immediate direct costs of their property offenses. Perhaps the public cost is even enhanced by the presumed necessity of fielding enforcement programs that increase the arrest count and number of pounds seized without even putting a dent in the number of drug traffickers and the consumption of drugs?

We shall not levy a detailed criticism at the prediction literature at this point, particularly at that which suggests that concentration on a specific type of offender will pay high dividends in crime reduction, but we have long been concerned about the tendency to produce very high estimates of offense frequencies among serious offenders, frequencies inflated by high self-reports (Greenwood and Abrahamse, 1982). In some cases these are drug offenses which may occur again and again each day. The claim that selective incapacitation of drug offenders, for example, will take a big bite out of

crime may be misleading. That high rate robbers (Johnson and Wish, 1987), commit many other offenses may be an exception to the conclusion that specific offenses should not be a basis for targeting offenders.

Although our own efforts at delinquent/criminal typology development with the Racine birth cohort data have not produced much improvement in predictive efficiency over simple measures based on offense frequency and seriousness, these efforts led to an investigation of how the behavioral content of some offender types in conjunction with its social context, societal setting, or neighborhood milieu may provide the cement for important linkages or be the catalyst for continuity in delinquent or criminal careers. The more that we thought about the work that has been done on what some term the drug connection, the more that we could see the value of recoding and reanalysing the data. Reanalysing the existing data would come first as a guide to recoding and bringing the 1955 Cohort up to 1988.

To further set the stage for our current research, we turned to a brief summary of drug/delinquency/crime findings from the Racine official police contact data for all cohorts (1942, 1949, and 1955) and self-report data for the 1942 and 1949 Cohorts.

Offense Seriousness for Drug Users/Offenders Compared to Non-Drug Users/Offenders in the 1942 and 1949 Cohorts and Offenders in the 1955 Cohort

How did career seriousness scores differ between drug users/offenders and non-drug users/offenders? Forty percent of 715 persons in the 1942 and 1949 Cohorts who filled out self-reports and had continuous residence in Racine revealed at least some marijuana and/or other drug use but only 10% of those completing self-reports said that they "frequently" or "all of the time" smoked marijuana or used other drugs. Only 1.8% had official involvement in drugs, half of those involved were only misdemeanor-level offenses. Police contact data for these self-reported, at least one-time, drug users produced mean official offense seriousness scores of 11.8 for the juvenile period and 12.5 (11.9 with drug contacts removed) for the adult period in comparison to non-drug user scores of 3.2 and 6.0 for these age periods.

The mean self-report seriousness scores for drug users of 45.0 for the juvenile periods and 60.1 for the adult period also contrasted with the non-drug user scores of 21.5 and 17.4. If self-reported drug use by the former was removed from their seriousness scores, their scores dropped to 43.5 and 42.0, still twice as large as the mean for non-drug users.

There were 353 people from the 1942 and 1949 Cohorts who had police contacts for offenses other than traffic or suspicion, investigation, or

information. The 54% of this group who were at least one-time drug users had mean official seriousness scores of 17.1 for the juvenile period and 17.8 for the adult period (14.6 and 16.8 with drugs removed). The non-drug users (46%) had scores of 7.8 and 12.8. The mean self-report seriousness scores of this group were 52.0 for the juvenile period and 66.4 for the adult period but dropped to 50.1 and 47.0 when drug use admissions were removed from the seriousness scores. By comparison, the non-drug users had mean self-report scores of 32.3 and 20.8.

The police contact records of drug offenders in the 1955 Cohort produced official seriousness scores of 64.6 and 50.1 (55.1 and 30.7 with drug offenses removed) for the juvenile and adult periods, compared to 8.2 and 4.6 for all of the non-drug offenders or 18.6 and 9.6 when the means were based on 1001, 1955 Cohort members with offenses other than traffic or suspicion, investigation, or information.

No matter how we looked at it, self-reported drug users had more serious juvenile and adult offense careers, official and self-reported, than did those who did not report drug use. At this point, no causal implication could be drawn because we had not yet dealt with the juxtaposition of drug and other offenses or sanctions for either. It was simply recognizing that differences in careers which have been found in metropolitan areas and highly publicized in the media were also found in Racine commencing in the 1960s.

Offense Seriousness for Drug Offender Types vs. Non-Drug Offender Types

No one would argue that drug offenders/users, whether identified from official records or self-report, did not have higher total offense seriousness scores (police contact or self-report data) than did cohort members who were not drug offenders. However, if the 1942 and 1949 Cohorts are dichotomized as drug user or non-drug user types on a basis of the self-report data, the official seriousness scores and the self-report seriousness scores differ less than they do when the dichotomy is based on official police contact data, i.e., had police contact for drug offenses or did not have police contact for drug offenses. In other words, those cohort members who admitted having used drugs and whom we had placed in one of the drug offender types on this basis, had, on the average, little or no more serious offense scores, official or self-reported, than did non-drug offender types, particularly if persons without contacts other than for traffic or suspicion, investigation, or information were removed from the analysis. Moreover, if offenses based on the drug use admissions are removed from the scores of the adult drug offender

types, their mean offense score is lower than that for the non-drug offender types. Drug offender types are not always the most serious offenders overall.

Some of the official record differences occur because the officially recognized/defined drug user/offender is probably not representative of all drug users/offenders. Many are lower SES and no matter whether or not engaged in crime at the moment are much more likely to have had and continue to have contact with the police than are middle and upper SES drug users who may be less active or not active in crime (Part I offenses). Where do lower SES drug users hang out in comparison with executives who purchase their drugs on the way home after a ghoulish day at the market? And, as we have previously stated, those who frequent bars and taverns have seen and heard how these things happen in real life, even in non-metropolitan communities.

Comparing the Distribution of Official and Self-Report Types

Tables 1 and 2 are so fundamental that we shall present them early in the report. Perusal of Table 1 will permit the reader to easily see why we make such frequent references to the drug/delinquency/crime nexus as being very complex. Each of the first two percentaged columns in this table under Typology Constructed from Official Data (Juvenile Drugs) adds to 100% and shows that 31 respondents who admitted on the self-report that they had used marijuana or other drugs as juveniles were disproportionately classified as all-around street offenders, burglars plus, auto thieves plus, assaulters plus, thieves and thieves plus, and sex offenders, compared to those who did not admit juvenile drug use. The 684 cohort members who did not admit drug use are far more frequently in the official No Contact category (58.2%) than are those who admitted drug use (25.8%).

The second set of columns (Adult Drugs) suggests that the 279 adults who admitted drug use do not differ from the 436 non-users quite so much and a greater proportion have not had their names in the police records.

The third set of percentaged columns utilizes the self-report offense typology. Here we see that the 31 marijuana and other juvenile drug users differ from the 684 non-drug users considerably more than they did when classified according to the typology based on official data. Almost two-thirds of the drug users were included in the robbery plus, weapons plus, and auto theft type!

The fourth set of columns is for the adults and, although the adult drug users do not differ from the non-drug users as much as they did among the juveniles, almost 40% were found in the more serious types.

TABLE 1. DISTRIBUTION OF OFFENDER TYPES BASED ON OFFICIAL AND SELF-REPORT DATA BY SELF-REPORT RESPONSES ON MARIJUANA AND OTHER DRUG QUESTIONS: 1942 AND 1949 COHORTS

Types	Typology Constructed from Official Data				Types	Typology Constructed from Self-Report Data			
	Juvenile Drugs		Adult Drugs			Juvenile Drugs		Adult Drugs	
	Yes	No	Yes	No		Yes	No	Yes	No
Murder	----	----	----	----	Robbery +	16.1	1.2	2.9	.9
Street	3.2	.4	1.1	----	Robbery	----	.1	----	----
Assault +	----	.3	1.1	.7	Weapons +	29.0	3.5	13.6	3.7
F Sex +	----	----	.4	----	Weapons	----	.1	----	.7
F Sex	----	----	.4	----	Auto Th +	19.4	6.4	2.2	.9
F Drugs +	----	----	1.1	----	Auto Th	----	.3	----	----
F Drugs	----	----	.4	----	Burglary +	3.2	7.7	3.2	.7
F Burglary +	6.5	1.3	----	----	Burglary	----	.3	----	.2
F Burglary	----	.3	.7	----	Steal +	----	2.5	.4	.2
F Theft +	----	.3	----	----	Steal	----	.3	----	----
F ForgFraud	----	----	1.4	.5	Assault +	9.7	16.7	17.2	6.9
F VPD	----	.1	----	.2	Assault	----	1.3	----	----
F Auto Th +	6.5	1.2	.7	----	Drugs +	3.2	----	19.0	----
M Burglary +	3.2	----	----	----	Drugs	----	----	.7	----
M Assault +	3.2	.1	.4	.5	VPD +	----	2.8	----	.7
M Assault	----	.3	1.4	----	Drunk D +	3.2	4.1	31.5	29.8
M Drugs	----	----	.4	----	Drunk D	----	----	----	7.6
M VPD	----	.1	----	.7	Theft +	6.5	11.8	.4	.7
M Theft +	9.7	5.6	2.2	1.6	Theft	----	1.9	----	.9
M Theft	6.5	2.2	----	.5	Marij +	9.7	----	7.9	----
M ForgFraud	----	.1	----	.2	Marij	----	----	1.1	----
M Sex	3.2	.4	2.2	.2	Liquor +	----	8.0	----	6.7
Liquor	----	----	2.2	.9	Liquor	----	5.7	----	5.0
Gambling	----	.1	----	----	Disord +	----	1.6	----	.7
Traffic +	12.9	5.6	10.8	6.0	Disord	----	2.5	----	.2
Traffic	12.9	11.0	24.8	31.4	Traffic +	----	.3	----	1.8
Disord	3.2	5.7	6.5	3.0	Traffic	----	.7	----	9.9
Status	3.2	2.6	----	----	Incrr	----	1.0	----	----
Suspicion	----	3.9	6.5	4.1	Contact	----	2.0	----	.7
No Contact	25.8	58.2	33.7	49.5	No Contact	----	17.0	----	21.1
N	31	684	279	436		31	684	279	436

TABLE 2. DISTRIBUTION OF 1955 COHORT: DICHOTOMIZED BY OFFICIAL RECORD FOR DRUG OFFENSES DURING EACH AGE PERIOD

Police Contacts for Drug Offenses During:

Types Based on Official Record	Juvenile Period				Adult Period				
	Yes		No		Yes		No		
	Juv Typo	Adlt Typo	Juv Typo	Adlt Typo	Juv Typo	Adlt Typo	Juv Typo	Adlt Typo	
Murder	1.8	----	----	.2	Murder	1.1	2.2	----	.1
Street	1.8	5.3	1.4	.7	Street	11.2	7.9	1.0	.5
Assault +	1.8	----	.2	.5	Assault +	----	2.2	.3	.4
F Sex +	----	1.8	.1	.2	F Sex +	1.1	2.2	.1	.1
F Sex	----	----	.1	----	F Sex	2.2	----	-.1	----
F Drugs +	49.1	10.5	----	1.3	F Drugs +	7.9	37.1	1.0	----
F Drugs	35.1	1.8	----	2.0	F Drugs	2.2	48.3	.9	----
F Burglary +	----	5.3	2.7	.6	F Burglary +	12.4	----	2.2	.8
F Burglary	----	1.8	.6	.2	F Burglary	----	----	.6	.3
F Theft +	----	----	.8	.7	F Theft +	3.4	----	.6	.7
F ForgFraud	----	1.8	.3	.3	F ForgFraud	2.2	----	.2	.4
F VPD	----	----	.2	.2	F VPD	----	----	.2	.2
F Auto Th +	----	----	.8	.5	F Auto Th +	3.4	----	.7	.5
M Burglary +	----	----	.3	----	M Burglary +	----	----	.3	----
M Assault +	----	----	.5	.3	M Assault +	1.1	----	.5	.3
M Assault	----	3.5	1.0	.7	M Assault	1.1	----	.9	.8
M Drugs	10.5	----	----	----	M Drugs	----	----	.3	----
M VPD	----	----	.2	.3	M VPC	----	----	.2	.3
M Theft +	----	----	3.9	.8	M Theft +	5.6	----	3.7	.8
M Theft	----	----	2.4	.4	M Theft	3.4	----	2.3	.4
M ForgFraud	----	1.8	.1	.4	M ForgFraud	----	----	.1	.4
M Sex	----	1.8	.4	.5	M Sex	----	----	.4	.5
Liquor	----	5.3	----	1.1	Liquor	----	----	----	1.2
Gambling	----	----	----	----	Gambling	----	----	----	----
Traffic +	----	5.3	3.2	3.5	Traffic +	5.6	----	3.0	3.7
Traffic	----	15.8	7.3	15.6	Traffic	4.5	----	7.2	16.3
Disord	----	12.3	5.2	5.6	Disord	4.5	----	5.1	6.0
Status	----	----	6.9	----	Status	7.9	----	6.7	----
Suspicion	----	1.8	3.5	2.6	Suspicion	3.4	----	3.4	2.7
No Contact	----	24.6	57.6	60.8	No Contact	15.1	----	57.8	62.4
N	57	57	2092	2092		89	89	2060	2060

Comparing Juvenile and Adult Offender Types with Control for Police Contacts for Drugs During Each Age Period

Table 2 utilizes the official offense seriousness typology presented in Table 1, applies it to the 1955 Cohort, and shows how the juvenile and adult distributions of cohort members by offense types vary by whether or not 1955 Cohort members had had police contacts for drug offenses as juveniles or adults.

The distribution of offense types in the first set of columns reveals that 84.2% of the juveniles with police contacts for drug offenses fell in drug offender types as juveniles but only 12.3% did so as adults. Most of those 57 who had police contacts for drug offenses as juveniles and who were classified as juvenile drug-offender types based on their pattern of juvenile police contacts must, as adults, have had relatively less drug activity, have been more circumspect so as to not have had police contacts for their drug activity, or had, as in a few cases, moved into a more serious offender type. By contrast, there were relatively few cohort members in the serious offender types as either juveniles or adults among those 2092, 1955 Cohort members who had not had police contacts for drugs as juveniles.

Most (85.4%) of the 89 cohort members who had police contacts for drugs as adults were in the drug offender types as adults but had not been involved in drugs as juveniles, either because their involvement had not been detected by the police or because they had been placed in more serious offense categories (they had some offenses that were more serious than drugs). Those who had not had police contacts for drug offenses as adults appear to have had relatively little serious misbehavior as either juveniles or adults. Again, these data do not provide a basis for claims of a causal nexus between drugs, delinquency, and crime or the development of criminal types as a consequence of drug use.

The Temporal Sequence of Drug Contacts and Other Offenses

Our data from the 1955 Cohort revealed that felony-level contacts with the police for drugs may occur first as a juvenile or an adult, may or may not be preceded by a lengthy period of delinquency and crime, and may or may not be followed by a lengthy period of delinquency and crime (see the example in Diagrams 2 and 3).

Each of the 12 persons whose delinquent and criminal career is shown in Diagram 2, Long Career Juvenile Drug Offenders (20 or more police contacts), had quite different patterns of police contacts involving drugs and other types of offenses. Since this computer-drawn diagram is so complex that it is

DIAGRAM 2

LONG CAREER, JUVENILE DRUG OFFENDERS

TWELVE 1955 COHORT MEMBERS WHOSE FIRST FELONY DRUG CONTACT WAS BEFORE AGE 18

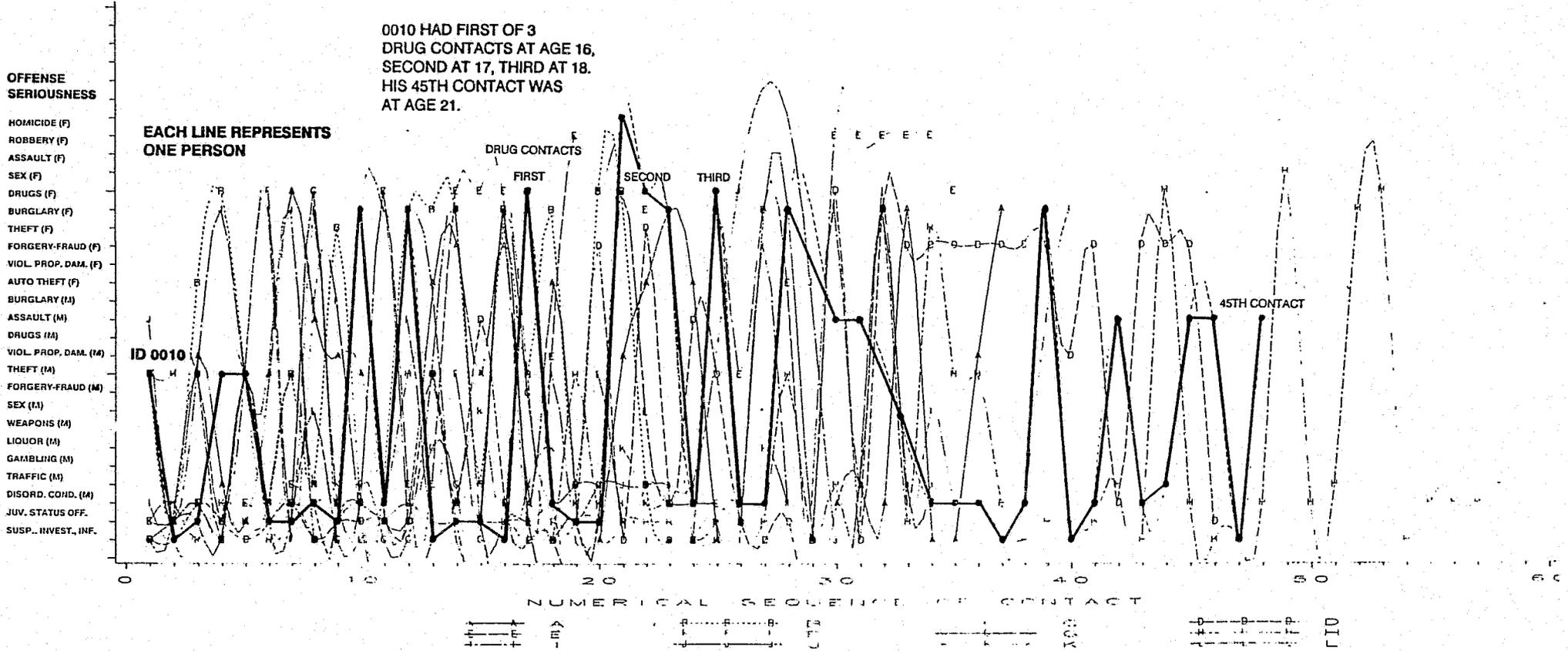
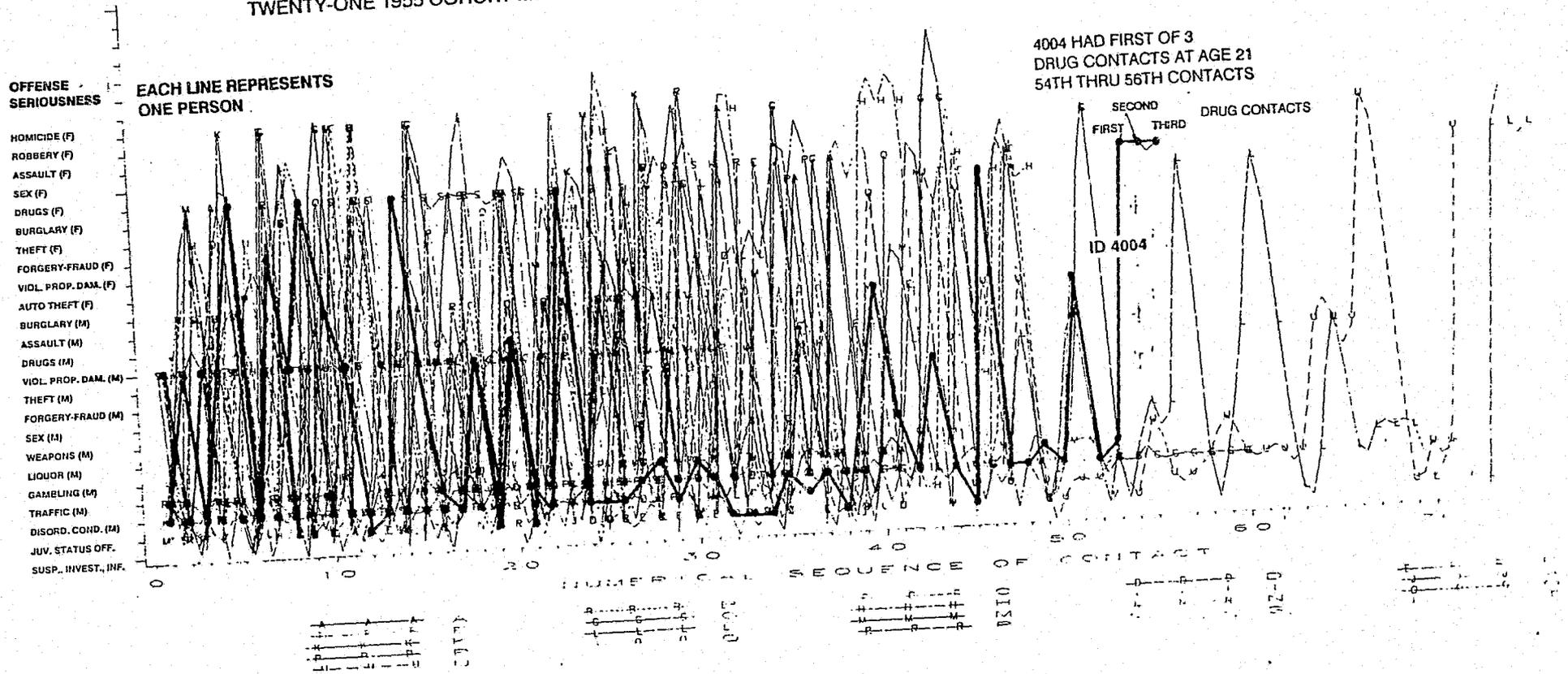


DIAGRAM 3
LONG CAREER, ADULT DRUG OFFENDERS
 TWENTY-ONE 1955 COHORT MEMBERS WHOSE FIRST FELONY DRUG CONTACT WAS AT AGE 18 OR LATER



difficult to follow an individual career, we have put the career of 1955 Cohort member 0010 in boldface as an example.

The age of first police contact for these 12 persons ranged from 6 to 14 while the age of first drug contact ranged from 15 to 17. The lowest number of police contacts for anyone was 29 and the highest was 58. Sanctions ranged from none at all prior to first drug contact (no contacts prior to drug contact) to one year or more of institutionalization. The reasons for police contact prior to first drug offense for which the most severe sanction had been received ranged from truancy to burglary. Eleven of the 12 were placed in the drug offender typology as juveniles but only two remained there as adults, one had become an all-around street offender, one a felony-level sex offender, four had become burglars, and four were in lesser offense types.

While most drug contacts were dismissed by the courts, three of the 12 cohort members had been institutionalized at one time or another after their first drug contact but in only one case was the institutionalization for a drug offense. Eight of the 12 received at least one sanction that was more severe after their first drug contact than had been their most severe sanction prior to a drug contact. We could go on to add other information about this group but suffice it to say that 92.0% of these long career, juvenile drug offenders were White males, only one was a female. A careful reading of the "life story" of each failed to suggest a common thread in their lives or to indicate how they might differ from persons with similar difficulties with the police who did not have official police contacts for drug offenses. This does not mean that further analyses will not enable us to find common threads in their careers or factors which differentiate them from similar juveniles who did not become involved with drugs.

The 21 "Long Career Adult Drug Offenders" are shown in Diagram 3. Here we have also placed one member of the 1955 Cohort in boldface, 4004. Each of these persons had their first drug contact at the age of 18 or older. Their first drug contact came at the age of 19.7 years compared to 16.3 for the 12 whose first drug contact was before 18. Their average number of police contacts was 43.6 compared to 34.4 for those who started earlier. Their total number of police contacts ranged from 24 to 76. Unlike the first group, 61.9% was Black. Of the 21, only two were White females and one was a Black female. Even though their first drug contacts came later, their first police contacts of any kind came a bit earlier, 9.6 years of age vs. 10.3 years of age for the first group. Their first drug contact ranged from being their 23rd contact to their 74th contact. In other words, except that their first

drug contact came at age 18 or older, drug contacts came at a variety of times throughout the adult offense career. Seventeen of the 21 received their most severe sanction before their first drug contact and five received their most severe sanction for a drug contact. More than half of this group received their most severe sanction for a theft or burglary contact prior to their first drug contact. The early appearance of theft and burglary may be readily seen in Diagram 3.

The range of offense seriousness and range of severity of sanctions after first drug contacts was almost the same for the juvenile and adult long career drug offenders. However, while the juvenile long career types were drug offender types as juveniles, the adult long career types were, as juveniles, in nine cases all-around street offenders and in nine other cases, burglars. As adults, 15 of the latter were drug offender types and five were murderers or all-around street offenders. These 33 persons are, however, only a small proportion (3.5%) of either the 943 juvenile or adult offenders and only 1.5% of the 2,149 persons in the 1955 Cohort as it was in 1976. How careers have changed will be described in a later chapter.

As we commenced our current research we could not help but wonder how the careers of these persons would develop when their records were brought up to age 33. As we have frequently said, the stochastic nature of official offense careers leaves us with a representation of the total offender behavior but may not or does not tell us the complete story of a person's behavior during any given short time period. Apprehension is too chancy for that to be the case.

With this brief introduction to the problem, we turn to the more complex analyses of the cohorts which, although they will not be carried out further with the 1942 and 1949 Cohorts, do set the stage for the analyses of the 1955 Cohort which will be extended to 1988 commencing with Chapter 4.

Chapter 2

CONTINUITY IN DELINQUENT AND CRIMINAL CAREERS: THE DRUG CONNECTION AND PLACE OF RESIDENCE

Introduction

When the 1942 and 1949 Cohorts were examined in terms of their official involvement in drugs, as mentioned in the first chapter, there were few with police contacts for drug offenses. As we indicated, self-reports were a different matter; 40% had admitted at least some drug use. The findings which convinced us that we were on the right track by looking into the drug connection can best be illustrated by self-reports from the 1942 and 1949 Cohorts and official records of the 1955 Cohort.

The Problem of Continuity

Returning to the question of continuity between the juvenile and adult periods, we have for many years presented the cohort data on number of offenses or seriousness of offenses as showing that those members of a cohort who are at the extremes of almost any continuum as juveniles are likely to be there as adults. We have utilized police contact data, referral data, court dispositions, severity of sanctions received, and scales that encapsulate a number of variables to represent careers. Nothing that we have done, however, has improved prediction from the juvenile to the adult period more than 25% beyond that attainable from the marginals. Predictions from the past to the future at early years produce even lower proportional reductions in error. Part of the problem, as everyone knows, is the matter of skewed marginals--a matter which becomes far greater if, for example, the behavior to be predicted is something like continuity in narrowly defined violent offenses, i.e., continuity from juvenile to adult among violent offender types.

To take an example from the official record offense typology data, there were 44 members of the 1955 Cohort in the all-around street offender (robbery + type), assault +, or sexual assault types as juveniles but only 9 of them remained in these violent offender types as adults. Even more (13) were in the drug offender and felony burglary types as adults. There were 28 in the violent offender types as adults who had been in other types as juveniles. Even if we go a bit further by including misdemeanor-level assaults and violent property destruction, the overall picture does not change.

If we rearrange these types without regard to the felony-level/misdemeanor-level dichotomy so that the most violent offender types (all-around street

offenders, assaulters, burglars and sexual assaulters) are at the extreme violent end of the continuum, a strategy that removes the felony/misdemeanor variable as an element in rank-ordering offender types, we still have a correlation of only .447, one which reduced to .307 if the no police contact types are removed.

In a sense, however, we may be barking up the wrong palmetto because, as we have shown, there is considerable heterogeneity of offenses within offender types as well as offense switching, as shown by Diagrams 2 and 3 in the last chapter. We should, therefore, not be surprised when the most serious category determining offender type changes between the juvenile and adult period, from drugs to burglary or from burglary to drugs.

What if we modify our strategy and dichotomize the types into larger categories which involve the greatest threat to persons and property? We find that 66.6% of the persons in the most threatening offense types as juveniles are in the least threatening categories as adults. The best prediction from the marginals is that no one in the cohort will be in a threatening category as an adult.

Unfortunately, this does not accomplish much. It should be noted, however, that the all-around street offenders and assaulters + had greater continuity than did any other type and that they also appeared disproportionately in the drug offender type as adults. This suggests that we should explore the drug connection a bit further, not because we are carpet baggers who wish to jump onto the drug express (we read Nelson Algren's Man with the Golden Arm before most of those who are in the drug war were out of diapers) but because drug use may have a catalytic effect.

The Relationship of Juvenile Offender Types to Adult Offender Types: Drug Offenders vs. Non-Drug Offenders in the 1955 Cohort

Diagrams 1A and 1B are based on the official offense seriousness typology used in Tables 1 and 2 of Chapter 1. Diagram 1A shows the typological distribution of the 136, 1955 Cohort members who had police contacts for drug offenses as juveniles or adults and Diagram 1B does so for those 2,013 who did not have police contacts for drug offenses during either period. About 60% of the cohort's most serious juvenile offender types and 45% of its most serious adult offender types are included in Diagram 1A which, along with Diagram 1B, reveals that there is no really straightforward relationship between police contact patterns or types as a juvenile and police contact patterns or types as an adult. When both diagrams are placed together, the correlation between juvenile and adult offense seriousness types is .449.

There were more persons observed than expected (based on the marginals) in the lower left hand corner of Diagram 1A, i.e., the very "bad" tended to remain "bad" disproportionately to how many were in serious offender types as adults (although some changed for the better). While there were 48 persons in the felony-level drug offender types as juveniles, most of them did not appear in felony drug types as adults. Most of the 76 in adult felony drug types had not been in the juvenile felony-level drug types. Thirty-one of the 76 adult drug offender types had been in various felony types but 14 had not had a police contact as a juvenile.

How do the 44 new adult felony drug offender types differ from the 33 who were drug offender types as juveniles who had desisted from serious crime as adults? How much of this is an artifact of police behavior and record keeping? All of this tends to upset those who are sure that early recorded drug use is a precursor to serious criminal careers or that adult drug offender types may be readily predicted by their juvenile behavior.

At this point the reader may be ready to ask what the individual official careers of the various offender types looked like. Tables 1 and 2 (only the first few panels of the complete typology are presented) detail the homogeneity within juvenile and adult offender types that we have mentioned, i.e., various less serious offenses are part of each offender type's repertoire of officially recorded misbehavior. Note that only one of the all-around street offenders had a police contact for drugs as a juvenile but that many of that type had felony-level drug contacts as adults. In fact, the official record shows relatively little connection between the drug offender type and assault or armed robbery but does show a tie to burglary-, theft-, and misdemeanor-level offenses. Observation of the typology indicates that while the delinquency/crime/drugs nexus exists, it alone is probably not the key to predicting career continuity. But, if we assume that the official records of young adults for the 1955 Cohort do not represent total careers and that extension of data collection will produce a more representative record, the trail is worth following.

The Relationship of Juvenile Types to Adult Types: Self-Report Data

Since we had self-report data for the 1942 and 1949 Cohorts, we now turn back to them for a look at the self-report data that included the use of marijuana, the use of other drugs, and two categories on alcohol use.

The typology based on the self-report data differs from that based on official data because there were some differences in the offense categories utilized and because the official offense seriousness typology was based on

the number of offenses in official records while the self-report typology was based on what people were willing to report about themselves in categories: 1) once or twice (very rarely), 2) occasionally, 3) frequently, and 4) all the time. The problems with categorization are known to us and in the future we shall deal with this numerically as well as categorically (the findings will probably be similar) but this is not the point at issue here.

When all interviewed members of the combined 1942 and 1949 Cohorts were arrayed on a self-report scale, juvenile drug use was a part of the behavior of most other serious types of offenders. For example, seven out of 17 all-around street offenders reported either hard drug and/or marijuana usage; nine out of 37 who reported carrying concealed weapons and involvement in a variety of other offenses also reported marijuana and/or drug usage; eight out of 57 who reported having stolen an automobile or used one without the owner's permission also reported drug and/or marijuana use. There were only a few such reports for the remainder of the 870 persons who submitted self-reports.

The adult experience, as shown in Table 3, differed considerably; 67 cohort members were in the hard drug offender type as adults (10.6%). In addition, nine out of 15 all-around street offenders used hard drugs and/or marijuana, 49 out of 71 weapons types used hard drugs and/or marijuana, 12 out of 15 burglar types did so, as did 53 out of 89 assault types. A sizeable proportion (86.8%) of those who could be defined as adult self-reported violent offender types admitted driving under the influence or drugs or alcohol and/or 36.0% had also had some involvement in drugs other than marijuana. The self-report data indicate that drug use among serious offenders is almost all-pervasive, but this is overlap, not necessarily causal.

Although persons with felony-level drug offenses as adults were half or more of the cohort members in each of the more serious offender types (alcohol and tobacco use is even more prevalent), unless these drug offenses were committed prior to the other offenses, knowledge of them would not be of much help in predicting serious criminal careers. We shall deal with that question a bit later.

When the interviewed 1942 and 1949 Cohort members with continuous residence (715) were divided into those 286 who had self-reported drug use (Diagram 2A) and those 429 who had none (Diagram 2B), the 40%-60% division mentioned earlier, it was clear that the most serious types of juveniles were found in the most serious types as adults to only a limited extent. These are the same 715 persons shown in the official typology columns of Table 1 in

		MARIJUANA				DRUGS						
1	1	9	4	10	18	24	20	11	13	BURGLARY	110	
1	1	3	4	6	8	11	13	BURGLARY +	46	71		
1	1	3	8	15	12	8	20	13	82			
1	1	6	8	15	12	8	10	13	40			
1	1	6	8	15	12	16	9	13	79			
1	1	6	8	15	12	16	13	45				
2	1	3	4	15	16	13	48					
1	1	3	4	5	6	8	13	39				
<hr/>												
1	1	3	4	10	12	7	16	10	11	12	THEFT 1 +	88
1	1	8	15	6	8	1	12	50				
1	1	7	12	20	12	24	30	33	141			
1	1	8	8	20	12	7	24	20	33	122		
1	1	3	8	20	12	24	20	33	121			
1	2	6	8	20	6	16	20	33	105			
1	2	6	10	12	16	16	33	79				
1	2	9	15	6	8	33	79					
1	2	3	15	18	24	30	22	114				
1	1	12	8	15	12	16	9	20	22	115		
1	1	2	3	4	10	18	14	16	20	22	110	
1	1	4	3	4	10	12	8	20	22	83		
1	2	4	9	15	6	24	10	22	88			
1	1	3	4	15	6	8	10	22	49			
1	4	3	16	20	24	32	22	121				
1	1	3	15	12	24	22	77					
1	2	12	12	24	22	72						
1	1	3	15	6	24	22	70					
1	2	9	7	16	22	56						
1	1	3	15	6	16	22	63					
1	1	3	5	6	16	22	52					
1	1	3	6	16	22	48						
1	1	20	16	22	58							
2	1	6	15	16	22	59						
1	1	4	6	10	16	22	58					
1	1	3	10	16	22	52						
1	1	4	15	12	8	22	42					
1	1	3	4	15	12	8	64					
2	1	3	8	10	8	43						
1	1	3	8	10	8	45						
1	1	3	8	10	8	33						
1	1	3	8	10	8	25						
1	1	3	8	10	8	22						
1	1	3	10	18	16	30	88					
1	1	3	10	18	16	30	70					
1	1	3	8	15	6	14	9	20	111	103		
1	1	15	18	24	20	11	88					
1	1	3	4	10	12	7	16	20	11	83		
1	1	6	4	12	14	8	9	10	11	74		
1	1	6	15	18	24	10	11	85				
1	1	3	15	12	24	10	11	75				
1	2	6	8	15	12	7	16	10	11	87		
1	1	9	4	15	12	16	10	11	78			
1	1	3	8	10	6	16	10	11	65			
1	1	2	3	4	3	24	7	8	10	11	75	
1	1	10	18	8	10	11	57					

		MARIJUANA				DRUGS					
1	1	8	6	8	9	11	ASSAULT +	43			
1	1	3	8	20	6	24	11	73			
1	1	3	8	15	12	24	11	61			
1	1	3	4	10	12	7	16	63			
1	1	3	4	12	7	16	11	53			
1	1	3	18	16	11	49					
1	2	3	8	15	12	16	11	67			
1	1	6	8	10	12	16	11	63			
1	1	3	15	6	16	11	52				
1	1	3	8	5	6	16	11	50			
1	1	6	6	16	11	39					
1	2	6	6	16	11	33					
1	1	9	4	15	16	11	55				
1	2	6	15	16	11	48					
1	1	6	10	16	11	43					
1	1	3	10	16	11	37					
1	1	3	16	16	11	30					
1	1	4	4	7	8	11	27				
1	1	4	12	8	11	37					
1	1	3	12	8	11	34					
1	1	3	15	6	8	11	43				
1	1	3	6	6	8	11	35				
1	1	3	4	6	8	11	33				
1	1	3	4	6	8	11	32				
1	1	3	4	15	8	11	41				
1	1	3	5	8	11	28					
1	1	3	4	5	8	11	27				
2	1	3	6	8	11	25					
1	1	3	3	8	11	23					
1	1	4	6	10	11	29					
1	1	6	5	11	33						
1	1	2	3	5	11	21					
1	1	3	3	11	14						
1	1	4	20	1	8	40					
1	1	3	18	24	30	30	DRUGS +	58			
1	1	6	12	15	24	24	30	90			
1	1	6	6	18	24	30	78				
1	1	8	3	4	24	16	30	85			
1	1	6	3	4	24	16	30	84			
1	1	6	3	4	18	8	30	36			
1	1	10	24	30	64						
1	1	8	9	8	15	12	16	9	20	98	
1	1	9	9	24	24	20	78				
1	1	3	15	18	24	20	80				
1	1	3	10	18	24	20	78				
1	1	18	24	20	62						
1	1	3	15	12	24	20	75				
1	1	3	12	24	20	59					
1	1	8	15	24	20	68					
1	1	15	24	16	20	75					
1	1	4	3	24	16	20	68				
1	1	9	15	18	16	20	78				
1	1	3	15	18	16	20	73				

		MARIJUANA				DRUGS					
1	1	15	18	16	20	DRUGS +	69				
1	2	8	18	16	20	64					
1	1	6	18	16	20	61					
1	1	3	15	12	16	20	67				
1	1	15	12	16	20	63					
1	1	3	4	10	12	16	20	66			
1	1	9	10	12	16	20	67				
1	1	6	5	12	16	20	59				
1	2	9	8	15	6	16	20	75			
1	1	15	24	8	20	67					
1	1	24	8	20	52						
1	1	3	18	8	20	49					
1	1	10	12	14	20	37					
1	1	12	12	20	33						
1	1	12	20	23							
1	1	3	4	5	12	16	9	10	59		
1	1	8	5	18	8	9	10	59			
1	1	6	20	18	24	10	79				
1	1	3	4	12	7	16	10	52			
1	1	2	3	4	5	18	16	10	59		
1	1	3	15	12	16	10	56				
1	1	4	3	4	12	16	10	49			
1	2	4	12	16	10	38					
1	1	3	4	10	6	16	10	49			
1	1	3	10	6	16	10	46				
2	1	3	10	6	16	10	45				
1	1	5	6	16	10	37					
1	1	3	4	10	6	7	8	10	48		
1	1	3	8	15	18	8	10	63			
1	1	3	10	18	8	10	49				
1	1	4	3	4	18	8	10	48			
1	2	6	4	15	12	8	10	57			
1	1	3	15	12	8	10	48				
1	1	15	12	8	10	45					
1	1	3	10	12	8	10	43				
1	1	2	12	8	10	32					
1	1	12	8	10	30						
1	1	3	10	6	8	10	37				
1	1	20	18	28	10	76					
1	1	3	4	5	6	10	16				
2	1	3	4	5	6	10	23				
1	1	6	16	18	10	40					
1	1	3	4	5	6	9	29				
1	1	4	3	5	9	22					
1	1	3	4	20	12	24	63				
1	1	6	15	12	24	57					
1	1	6	15	12	24	36					
1	1	3	15	6	24	50					
1	2	3	15	6	24	48					
1	1	3	4	5	6	24	43				
1	1	6	8	6	24	44					
1	1	6	8	6	24	31					
1	1	2	6	15	24	47					
1	1	2	3	15	24	44					
1	1	3	15	24	43						
1	1	6	10	24	41						

Chapter 1 as percentages for juveniles and adults but here letters represent the numbers in each cell in Diagrams 2A and 2B: A = 1, B = 2, etc., to Z, which = 26 or + cohort members.

Marijuana and other drug users, although concentrated (86%) in the upper right hand corner of Diagram 2A, were also found in some of the most serious types as juveniles and/or adults, indicating that serious offense continuity was more evident among those who had reported themselves as drug user/offenders. Non-drug users were concentrated (96%) in the upper right hand corner in the least serious police contact offender types as juveniles and adults.

This still does not tell us that marijuana and drug use led to delinquency and crime or to continuities in either during the 1950s through the early 1970s because most of the 1942 and 1949 Cohort members, drug users or not, had rather modest careers in delinquency and crime--and there were more drug users than criminals.

The Ecology of Drugs and Serious Crime

Although we shall expand on the changing ecology of Racine and its relationship to the spatial distribution of drugs and crime in the next chapter, preliminary reference will be made to the distribution of drug offenses and street crime at this point, more serious types of street offenders vs. drug offenders and self-reported drug offenders. Table 4 shows how Racine's 65 neighborhoods were arrayed within each of the four major categories, inner city, transitional, stable, and peripheral, according to the proportion of the all-around street offenders found in the neighborhood. Much of the serious delinquency and crime in Racine is concentrated in only 10 of those 65 relatively homogeneous neighborhoods. The first seven inner city neighborhoods had disproportional shares of the all-around street offenders. Neighborhood 11, for example, contained only 1.4% of Racine's population but contained 8.4% of those 1955 Cohort members who were in the all-around street offender type as juveniles and 12.5% of that type as adults.

While the first five neighborhoods within the inner city had disproportional shares of the drug offender types, there were other neighborhoods throughout Racine with disproportional numbers of drug offenders as juveniles or adults. Quite apparent, however, is the fact that seven or eight transitional, stable, and peripheral neighborhoods also had disproportional numbers of drug offenders. Even more surprising, or perhaps not by this point, is that the distribution of self-reported drug users, juvenile or adult, reveals much more congruency with the distribution for

TABLE 4. DISTRIBUTION OF RECORDED DRUG OFFENDERS AND ALL-AROUND STREET OFFENDERS (1955 COHORT) AND SELF-REPORT DRUG OFFENDERS (1942 AND 1949 COHORTS)

NGH	% 1955 Cohort in NGH	<u>Police Contacts</u> %		<u>Police Contacts</u> %		<u>Self-Report</u> %	<u>Self-Report</u> %		
		All-Around Street Offenders in Neighborhood	Juv Adult	Drug Offenders in Neighborhood	Juv Adult		1942/49 Cohorts in NGH	Self-Report % Reporting Drug Offenses in NGHs	Juv Adult
I n n e r C i t y									
11	1.4	8.4	12.5	3.8	4.5	2.1	2.1	3.2	
7	2.4	3.6	15.6	---	7.5	3.3	3.4	2.4	
13	2.8	9.6	3.1	1.9	6.0	2.6	2.6	1.6	
12	2.3	8.4	3.1	1.9	7.5	1.5	1.4	1.6	
9	2.5	4.8	6.3	1.9	6.0	2.1	1.9	2.4	
17	1.8	4.8	6.3	---	1.5	1.8	1.7	2.0	
8	2.4	6.0	3.1	---	---	2.3	2.0	1.6	
10	1.5	2.4	3.1	---	1.5	1.8	1.9	1.2	
3	.4	1.2	3.1	1.9	1.5	1.0	1.0	1.0	
2	3.2	3.6	---	---	6.0	3.3	3.4	2.0	
5	2.0	1.2	---	3.8	4.5	2.8	2.7	1.6	
1	.1	---	---	1.9	---	---	---	---	
6	1.0	---	---	---	1.5	.7	.7	.4	
61	.2	---	---	---	---	.5	.5	.8	
T r a n s i t i o n a l									
18	1.3	3.6	6.3	1.9	3.0	1.5	1.4	1.6	
54	2.1	3.6	6.3	3.8	---	2.3	2.4	3.2	
37	1.6	2.4	6.3	3.8	3.0	1.3	1.4	---	
16	1.9	2.4	3.1	---	4.5	2.1	2.2	2.8	
49	2.0	4.8	---	3.8	1.5	2.1	2.1	.8	
46	2.6	3.6	---	5.8	1.5	2.0	2.1	1.6	
19	1.7	2.4	---	1.9	1.5	2.3	2.2	3.6	
50	2.2	2.4	---	1.9	---	1.8	1.5	2.0	
4	1.5	1.2	---	---	1.5	.8	.9	1.2	
33	2.3	---	---	1.9	1.5	1.3	1.2	2.0	
65	.2	---	---	1.9	---	---	---	---	
62	.3	---	---	---	---	.5	.5	.8	
60	.2	---	---	---	---	.2	.2	---	
S t a b l e									
31	3.0	2.4	3.1	1.9	1.5	2.9	3.1	2.8	
35	1.7	1.2	3.1	1.9	---	2.1	2.2	1.6	
56	2.1	---	3.1	7.7	---	1.5	---	2.0	
36	2.6	---	3.1	---	---	3.8	3.8	4.8	
29	2.1	---	3.1	---	---	2.6	2.7	2.8	
59	.3	---	3.1	---	---	.3	.3	---	
23	2.2	2.4	---	1.9	1.5	1.3	1.2	1.6	
15	1.6	2.4	---	---	3.0	2.8	2.9	4.0	
53	2.2	1.2	---	3.8	---	2.6	2.6	2.4	
30	1.3	1.2	---	1.9	1.5	.3	.5	.8	
14	2.1	1.2	---	1.9	---	2.9	3.1	4.0	
34	2.1	1.2	---	---	1.5	.8	.9	.4	
48	.2	1.2	---	---	---	.5	.3	.4	
32	3.1	---	---	1.9	3.0	3.4	3.3	3.6	
67	.5	---	---	1.9	---	---	---	---	
63	.2	---	---	1.9	---	1.0	.9	1.2	
64	.1	---	---	1.9	---	---	---	---	
21	1.3	---	---	---	1.5	2.9	3.1	1.2	
22	1.3	---	---	---	---	2.1	2.2	1.2	
20	1.0	---	---	---	---	2.1	1.9	2.0	
58	.6	---	---	---	---	.2	.2	---	
68	.4	---	---	---	---	---	---	---	
66	.1	---	---	---	---	.2	---	.4	
P e r i p h e r a l									
25	2.5	---	3.1	3.8	---	2.0	1.9	1.6	
47	2.1	1.2	---	1.9	7.5	1.3	1.4	.4	
41	1.3	1.2	---	5.8	---	.3	.3	.8	
28	2.6	1.2	---	1.9	---	2.0	2.1	2.8	
51	1.2	1.2	---	---	1.5	1.1	1.2	1.2	
38	2.7	---	---	5.8	1.5	2.0	2.1	3.2	
42	1.7	---	---	3.8	3.0	1.0	1.0	1.2	
55	1.6	---	---	1.9	1.5	1.5	1.5	2.0	
27	1.3	---	---	---	3.0	1.0	.9	1.6	
57	1.3	---	---	1.9	---	2.8	2.7	1.6	
39	2.0	---	---	---	1.5	1.1	1.2	.8	
24	.3	---	---	---	1.5	.8	.9	.8	
26	1.0	---	---	---	---	---	---	---	
52	1.6	---	---	---	---	---	---	---	
70	.5	---	---	---	---	---	---	---	

those cohort members who filled out self-reports. A portion of the difference between the distribution of self-reported drug users/offenders and officially recorded drug offenders may be attributed to a difference in patterns of use and trafficking, the latter being more visible and subject to public and police notice.

In sum, while only 20.6% of the 1955 Cohort resided in 10 inner city and transitional neighborhoods with high proportions of delinquents and criminals as juveniles, 55.2% of the juvenile all-around street offenders resided in these neighborhoods and 68.9% of those who were street offenders as adults also resided there as juveniles. In contrast, only 19.0% as juveniles and 39.0% as adults of the cohort members with drug offenses were from these neighborhoods. What does this do to over-simplified drugs cause crime, crime causes drugs, or the common cause explanations of the drug/crime link?

Since we do not yet have self-report data on the 1955 Cohort, we turned back to the 1942 and 1949 Cohorts and found that 20.3% of those who admitted drug use as juveniles and 19.6% as adults were from these neighborhoods, proportions similar to the proportion of self-reports (20.8%) obtained from these neighborhoods.

The widespread prevalence of drug use is further demonstrated when we turn to the nine Stable and Peripheral neighborhoods which produced about the same proportion of self-reported drug offenders (17.9% and 23.6%) and contained the same proportion of the population (19.0%) as did the 10 inner city and interstitial neighborhoods to which we referred. These neighborhoods produced a relatively small proportion of the all-around street offenders (6.0% and 9.3%) but 26.8% of the drug offenders who had their first offense as juveniles and 18.5% of those who had their first drug contact after the age of 18. Thus, it would seem, there are drug offenders whose offenses are part of a larger offense career, those whose drug offenses probably have little to do with either recorded delinquency or crime, and those whose delinquency and crime have little to do with drugs. We had suggested this before but had not arranged the data in such a fashion as to show it so clearly.

Continuity in Careers: Inner City vs. Other Neighborhoods and Drug Users/Offenders vs. Non-Users/Non-Offenders

Returning to the subject of continuity in careers between the juvenile and adult periods, we produced a dozen tables which shed some light on this question. Everyone interviewed in the 1942 and 1949 Cohorts was dichotomized as a self-reported drug user/non-user because there were too few who had drug

offenses on their records to include a dichotomy on that basis. Both of the career typologies, self-reported and official, were utilized.

When the self-report typology was considered, the relationship of juvenile to adult careers was greater among inner city non-drug users (.4757) than among drug users (.3447), less among drug users and non-drug users among those who resided in non-inner city neighborhoods as juveniles. Simple self-report seriousness scores between the juvenile and adult periods were correlated even higher for the same dichotomies (drug users .7512 and non-users .7523). This indicates, as shown in Table 5, that seriousness had more continuity than did rank-ordered types of offenders and continuity was higher in the inner city than in other neighborhoods.

The correlation indicating career continuity was highest (.6755) for inner city drug users, next for non-drug users (.5292) when the official typology was used in place of the self-report typology. Official offense seriousness scores produced even greater evidence of higher inner city continuity for drug users (.7828) but also considerable continuity for non-users (.6262). What we must realize, however, is that in the segments of Table 5 which we have just described, each divided into four groups by the drug use/non-use and inner city/non-inner city dichotomies, most of the continuity, with the exception of that based on the self-report typology, is generated by offenders with other than drug offenses because there were very few police contacts for drug offenses during either entire period of the 1942 and 1949 Cohorts.

All of this led us to Diagrams 3A, 3B, 3C, and 3D, which represent the position of members of the 1955 Cohort in the official records offense typology. When the 1955 Cohort was dichotomized (utilizing police contact records) as drug offenders vs. non-drug offenders and inner city vs. other juvenile place of residence, it was apparent that the continuity patterns based on the official offense seriousness typology were somewhat different from those found for the 1942 and 1949 Cohort patterns based on the self-report dichotomy. The signs for both drug offender groups were negative (-.1177 and -.4514) and the largest positive correlation (.3941), an indication of career continuity, was for inner city non-drug offenders, secondly for non-inner city non-drug offenders. This is consistent with the data presented in Diagram 1A where we revealed that there was little continuity for drug offender types between the juvenile and adult periods, a finding which may be accounted for in several ways, simply put, abstinence or failure to be detected by the police.

TABLE 5. RELATIONSHIP OF JUVENILE TYPES AND TOTAL OFFENSE SERIOUSNESS TO ADULT TYPES AND TOTAL OFFENSE SERIOUSNESS WITH CONTROLS FOR DRUG USER/OFFENDER VS. NON-DRUG USER/OFFENDER AND PLACE OF JUVENILE RESIDENCE*

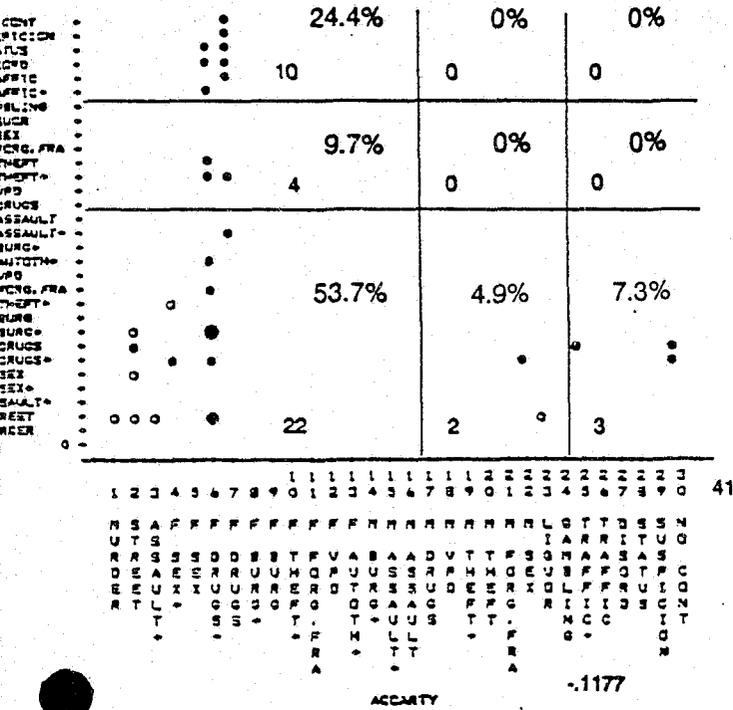
<u>1 9 4 2 - 1 9 4 9 C o h o r t s</u>				
	<u>Self-Report Typology</u>		<u>Self-Report Seriousness Scores</u>	
	Drug Users	Non-Users	Drug Users	Non-Users
Inner City	.3447	.4757	.7512	.7253
Non-Inner City	.1995	.3234	.4535	.4065
	<u>Official Offense Seriousness Typology</u>		<u>Official Offense Seriousness Scores</u>	
	Drug Users	Non-Users	Drug Users	Non-Users
Inner City	.6775	.5292	.7828	.6262
Non-Inner City	.3375	.1163 ns	.4405	.1832
<u>1 9 5 5 C o h o r t</u>				
	<u>Official Offense Seriousness Typology</u>		<u>Official Offense Seriousness Scores</u>	
	Drug Users	Non-Users	Drug Users	Non-Users
Inner City	-.1177 ns	.3941	.4807	.4213
Non-Inner City	-.4514	.3654	.3710	.3520

* Pearsonian Correlation Coefficients significant at .01 level or greater unless indicated.

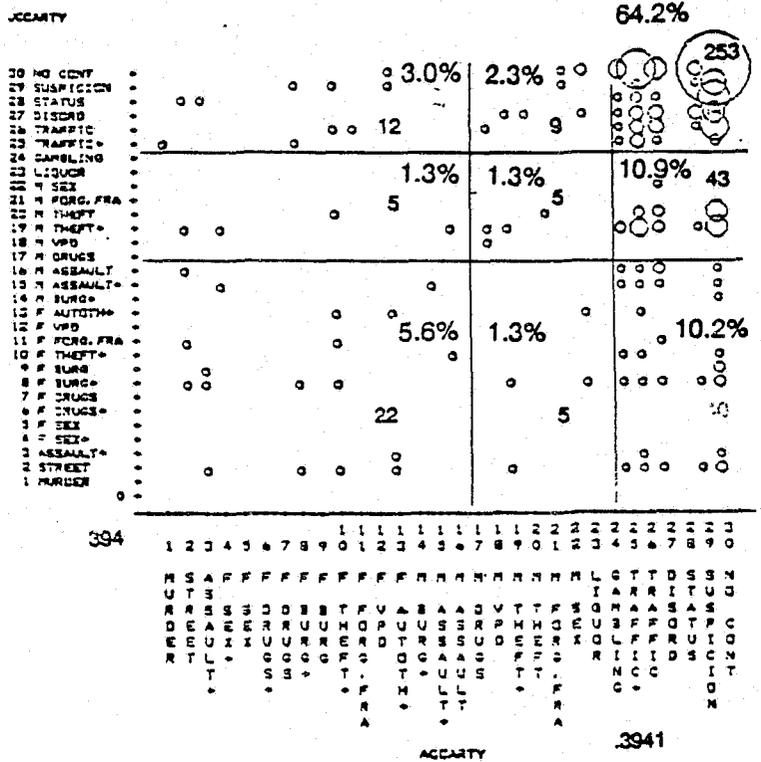
DIAGRAM 3. JUVENILE OFFICIAL RECORD OFFENSE TYPE VS. ADULT OFFICIAL OFFENSE TYPE. 1955 COHORT

INNER CITY

A. POLICE CONTACTS FOR DRUGS

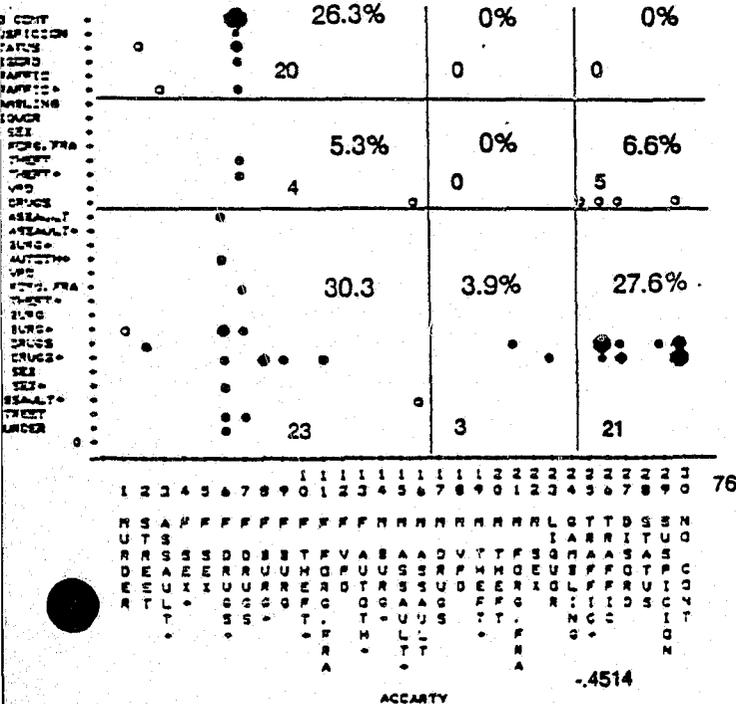


C. NO DRUG CONTACTS

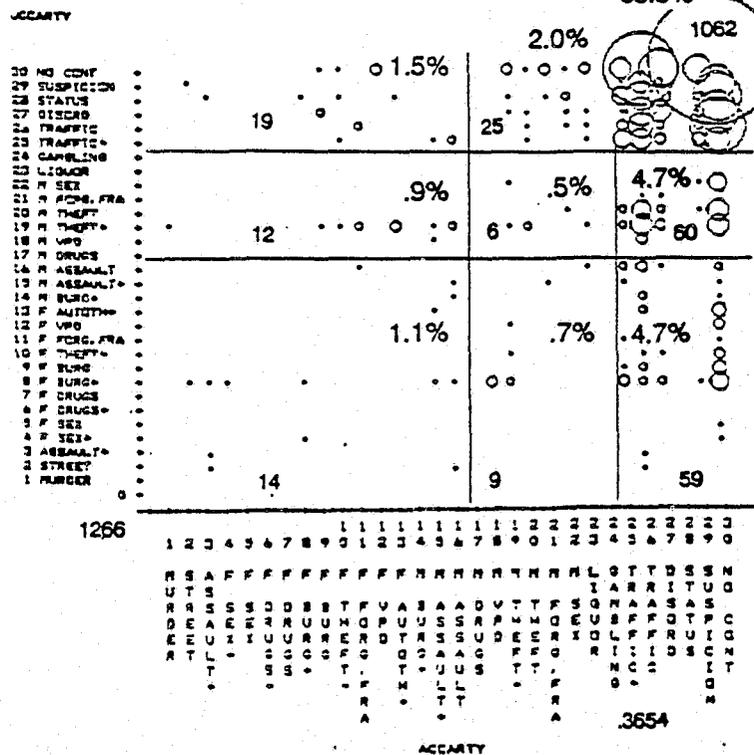


NON INNER CITY

B. POLICE CONTACTS FOR DRUGS



D. NO DRUG CONTACTS



It is worth noting that there was little movement away from serious offense types between the juvenile and adult periods among those drug offenders who lived in the inner city as juveniles (Diagram 3A) but there was considerable desistance from serious career types among those who resided in non-inner city neighborhoods (Diagram 3B). Perusal of these four tables illustrates the diversity in juvenile/adult continuity that is generated by controlling for place of residence and by whether or not a cohort member has had police contacts for drug offenses.

If we turn again to Official Offense Seriousness Scores, the variable which represents the seriousness of offenses weighted by the frequency of these offenses, the highest correlations (lower right hand segment of Table 5) are found for inner city drug offenders, .4807. Since persons in the 1955 Cohort had only a few years beyond age 18, given the stochastic nature of careers, the relatively low offense seriousness continuity for this cohort is not unexpected.

The Direction that the Racine Research Should Take

While measures of juvenile/adult continuity tended to focus our attention on drug users/offenders, the difference between inner city drug users/offenders and non-users/offenders was relatively small. It is questionable whether Racine or other data or the accounts currently headlined in the media provide a basis for directing our attention (justice system) to drug users/offenders as the heart of the crime problem rather than to serious inner city offenders and the nature of the society that generates them. One could also construct a rationale for research focusing attention on drug users/offenders who work in the inner city but who reside in the suburbs (or at least in glitzy inner-city dwelling units) but hold such responsible positions in society that their drug use presents a greater threat to the social structure than that of the inner city poorest of the poor whose only organizing principle in life is the search for funds with which to become "high." Does "cracking" down on drugs provide the poor with opportunities for integration into the larger society or with another life theme?

The delinquency/crime problem, insofar as it is one of dealing with all-around street offenders, appears to be one of how to deal with those who, as a consequence of their antecedents and ascribed/achieved characteristics, have not been integrated into the larger society. Solving the crime problem involves looking at delinquents and criminals as products of society rather than as kinds of people.

The further we examined the data from "Prediction and Typology Development," the more that we realized that the question of how offender type distribution and continuity varies with drug involvement and neighborhood of residence is a question of theoretical importance. Given that drug users are far more widely dispersed throughout the community than are persons with police contacts for offenses and specifically for drug offenses, a combination of social structure and social process theory will be needed as the basis for generating testable hypotheses about the complex relationship of drugs to delinquency and crime.

What seems most apparent, considering the analyses that we have conducted, is that there is a linkage between drugs and a proportion of the ordinary street crime in the inner city but that this linkage is present to a more limited extent or is almost absent for non-inner city areas. When a link is present outside the inner city, it may involve a different type of crime.

The error that many have made is to look for the link rather than how different kinds of links develop. That this is what we must do should not be surprising considering the structure or organization of society, its relationship to the ecology of the city, and variation in social processes that are related to the demographic and socioeconomic composition of neighborhoods. Without some sort of sociological framework, there is the danger of continuing to seek answers, as in the past, to simple questions like "which kinds of people commit crimes and which kinds of people become involved in drugs?"

Chapter 3

THE CHANGING ECOLOGY OF RACINE AND CHANGING PATTERNS OF OFFENSES

The Changing Characteristics of Police Grid Areas/Aldermanic Districts

The complexity of the kinds of analyses which we have been conducting covering a 40-year period in Racine has been increased by the changing ecology of the city and further increased because the spatial units of analysis used for reporting offenses known to the police have changed. Some data series are no longer available. The number of the various Part I offenses known to the police were reported by Police Grid Areas for 14 years; this was followed for five years by Aldermanic District reports; in 1989 reporting was changed to Police Patrol Areas.

Map 1 shows the Police Grid Areas overlaid on the Natural Areas which we created early in our research. The Natural Areas were based on U.S. Census of Population and Housing Block Data and land use data (Shannon, 1981). Each of the Police Grid Areas is approximately a mile square. Although we have utilized both of these spatial units in numerous analyses with data obtained from the Records Division of the Racine Police Department, we have always been concerned about the relative lack of homogeneity of both of these spatial units. Map 2 with Police Grid Areas overlaid on a 1970 housing quality and land use map, clearly indicates the heterogeneity that is present within the spatial units delineated by this type of spatial system.

Some Police Grid Areas had almost 8,000 persons in them and some peripheral grids less than a thousand. Whatever the shortcomings of Police Grid Areas, data sets based on them gave us an idea of the relationship of demographic change and changing patterns of land use to changing patterns of offenses known to the police. These data for the entire city provide a backdrop for the cohort analyses that we have presented in papers, reports, articles, and monographs.

To take a simple example of the changes which have taken place, inner city, interstitial, and transitional Police Grids 8, 12, 13, and 16 contained 49.3% of Racine's population in 1950 but only 28.3% in 1980 yet their proportion of the Part I offenses known to the police declined very little, 49.4% in 1968 to 43.1 in 1981. Peripheral Police Grids 1, 2, 5, 6, 10, 15, 19, 22, and 23 contained only 5.8% of the population in 1950 but 27.7% in 1980; their proportion of the Part I offenses rose from 18.5% to 19.9%, a

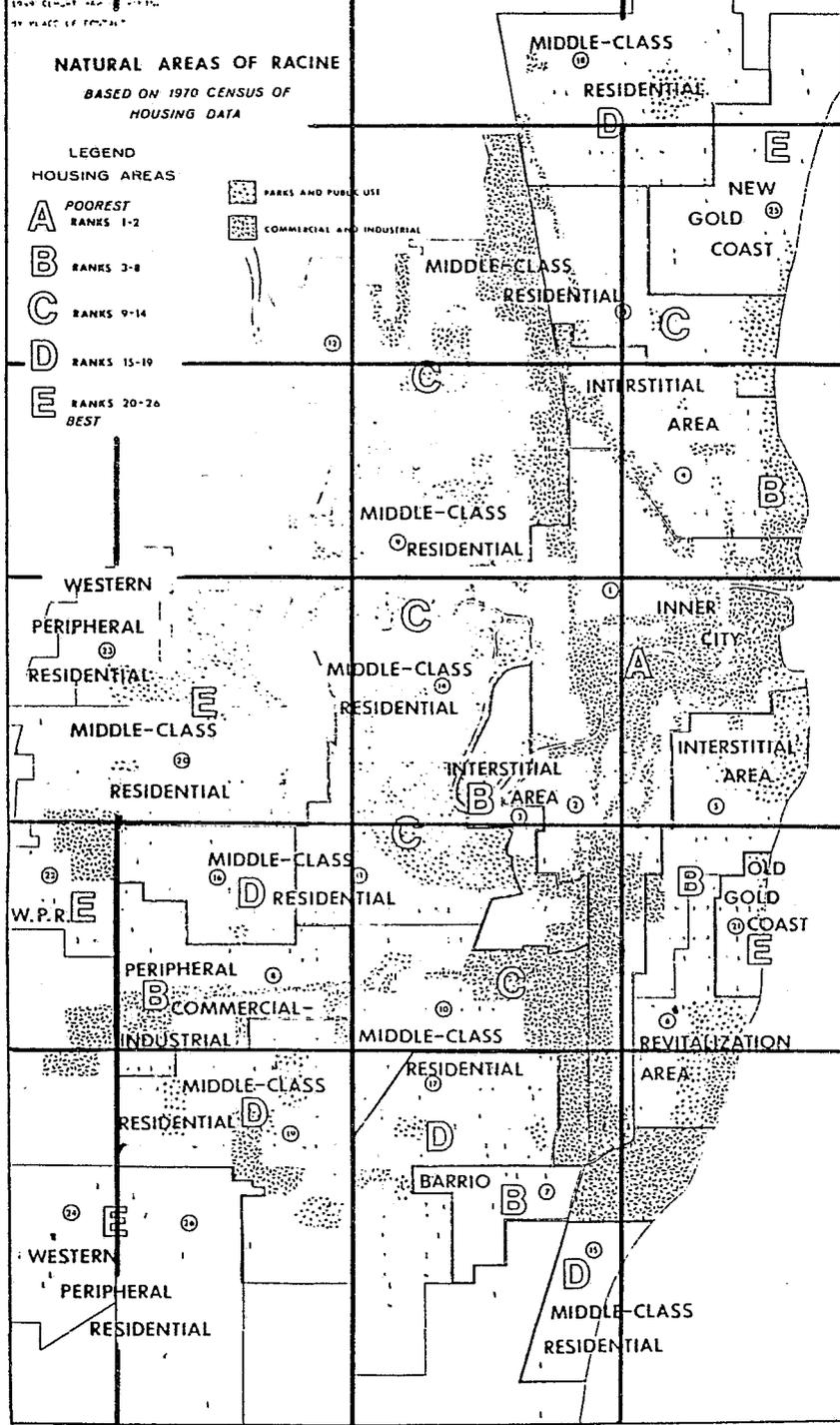
POLICE GRID AREAS

NATURAL AREAS OF RACINE
BASED ON 1970 CENSUS OF HOUSING DATA

LEGEND
HOUSING AREAS

- A POOREST RANKS 1-2
- B RANKS 3-8
- C RANKS 9-14
- D RANKS 15-19
- E RANKS 20-26 BEST

- PARKS AND PUBLIC USE
- COMMERCIAL AND INDUSTRIAL



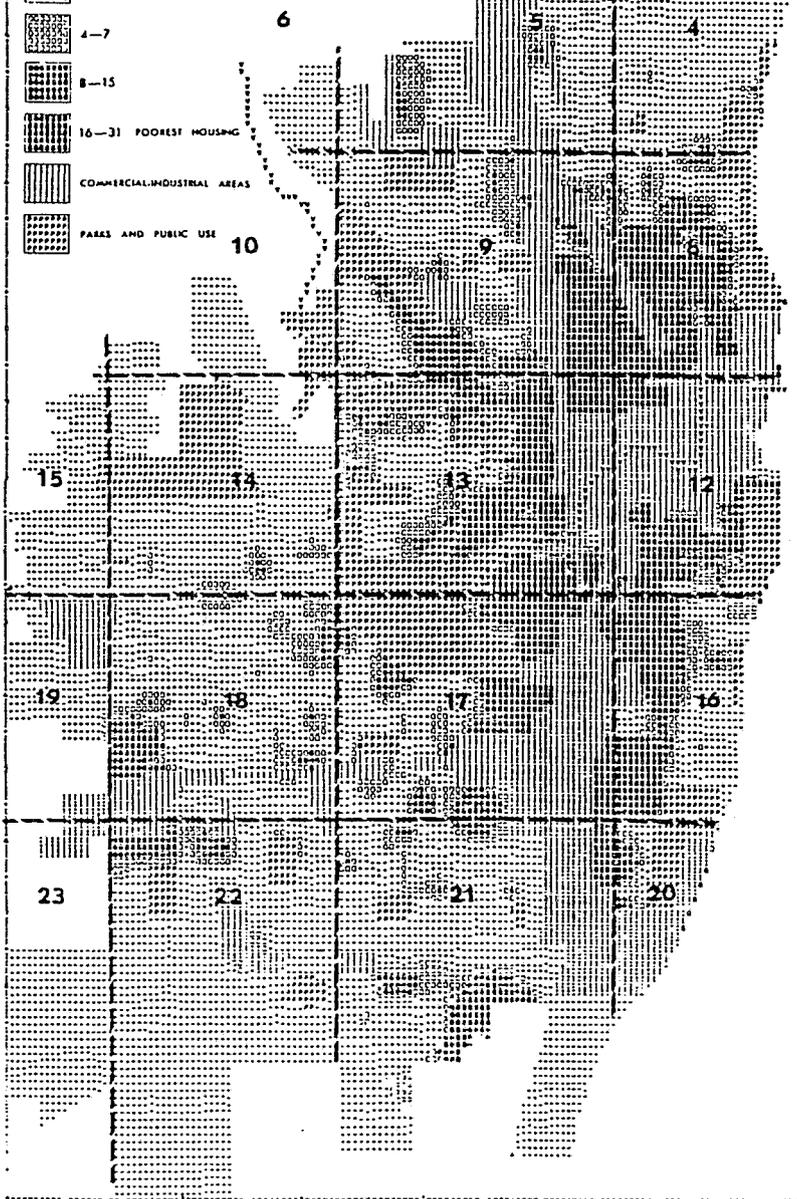
NATURAL AREAS OF RACINE BASED ON 1970 CENSUS OF HOUSING DATA

HOUSING CHARACTERISTICS AS DETERMINED BY
COMPARISON OF HOUSING AND POPULATION DATA

GEOMETRIC SCALE SCORES

- 0 BEST HOUSING
- 1-3
- 4-7
- 8-15
- 16-31 POOREST HOUSING
- COMMERCIAL/INDUSTRIAL AREAS
- PARKS AND PUBLIC USE

POLICE GRID AREAS



relatively small increase considering population growth but not surprising considering the underlying "causes" of most Part I offenses.

Map 3 shows the location of major tavern areas, commercial-industrial areas, and public use areas and goes a step further in indicating in which Police Grid Areas high police contact rates were to be expected. Since Police Grid Areas do not have the homogeneity of the neighborhoods to which we shall refer later in this chapter, they were not subjected to the computer clustering of neighborhoods that we conducted in the process of delineating delinquency and crime producing areas (Shannon, 1984a). They did suggest, however, that traditional notions about the concentration and dispersion of delinquency and crime following the ecological structure of the city should guide our continuing analyses of the Racine data.

The more homogeneous Aldermanic Districts shown on Map 4 are overlaid by Police Grid Areas (dashed lines). The reader should note that some larger Police Grid Areas, Grid 13 as indicated on the map for example, become part of several Aldermanic Districts and that some Aldermanic Districts encompass two Police Grid Areas, Aldermanic 15 (Grid 1-4) and 16 (Grid 2-5). The relationship of Grids to Aldermanic Districts and the analytic problems created by changes in statistical reporting will be shown as the story of changing offense rates unfolds in this chapter.

Were changes in areas and problems with homogeneous spatial units not enough, we have relied on the decennial censuses (1940, 1950, 1960, 1970, and 1980) and then on our own intercensal estimates to generate an offense rate between census years for the city and whichever spatial units for Part I offenses were available. Unfortunately, our population estimates for 1981 through 1983 for Police Grid Areas may not be accurate because some grids may have changed their growth rate. Similarly, our estimates for Aldermanic Districts from 1983 through 1987 may be in error because some districts have grown in recent years at a rate different from their closest Police Grid Area counterpart. Yet, it is important that we indicate how the city has changed and how offense rates have changed as a background for further references to the birth cohorts and extensive analyses of the up-dated 1955 Cohort.

At the same time, we must also place offense rate differences between spatial areas and fluctuations within spatial areas in perspective. Although this is a matter that was dealt with in an earlier report and a recent volume (Shannon, 1981 and 1988), we must consider this topic as well as some of those which were mentioned in the first two chapters as important for the heretofore uninformed reader or those who have perused our reports and publications over

MAP 3

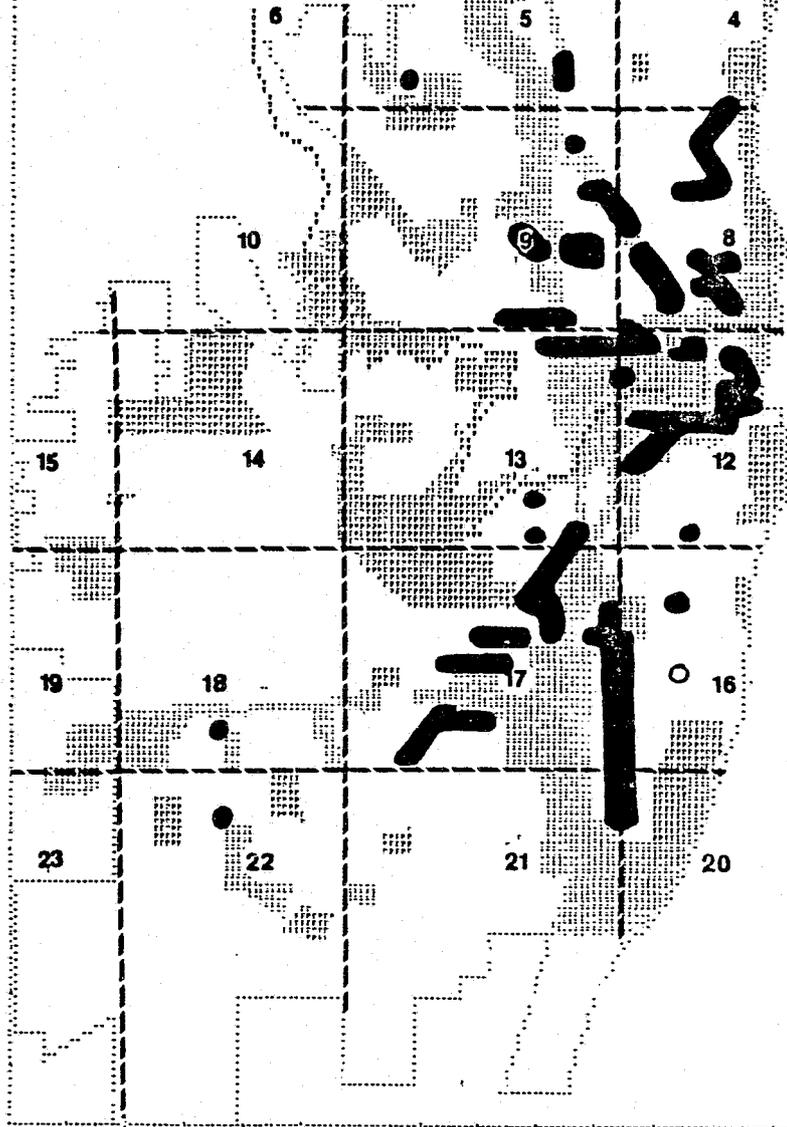
COMMERCIAL-INDUSTRIAL AND
PARKS-PUBLIC USE AREAS
OF RACINE 1970

POLICE GRID AREAS

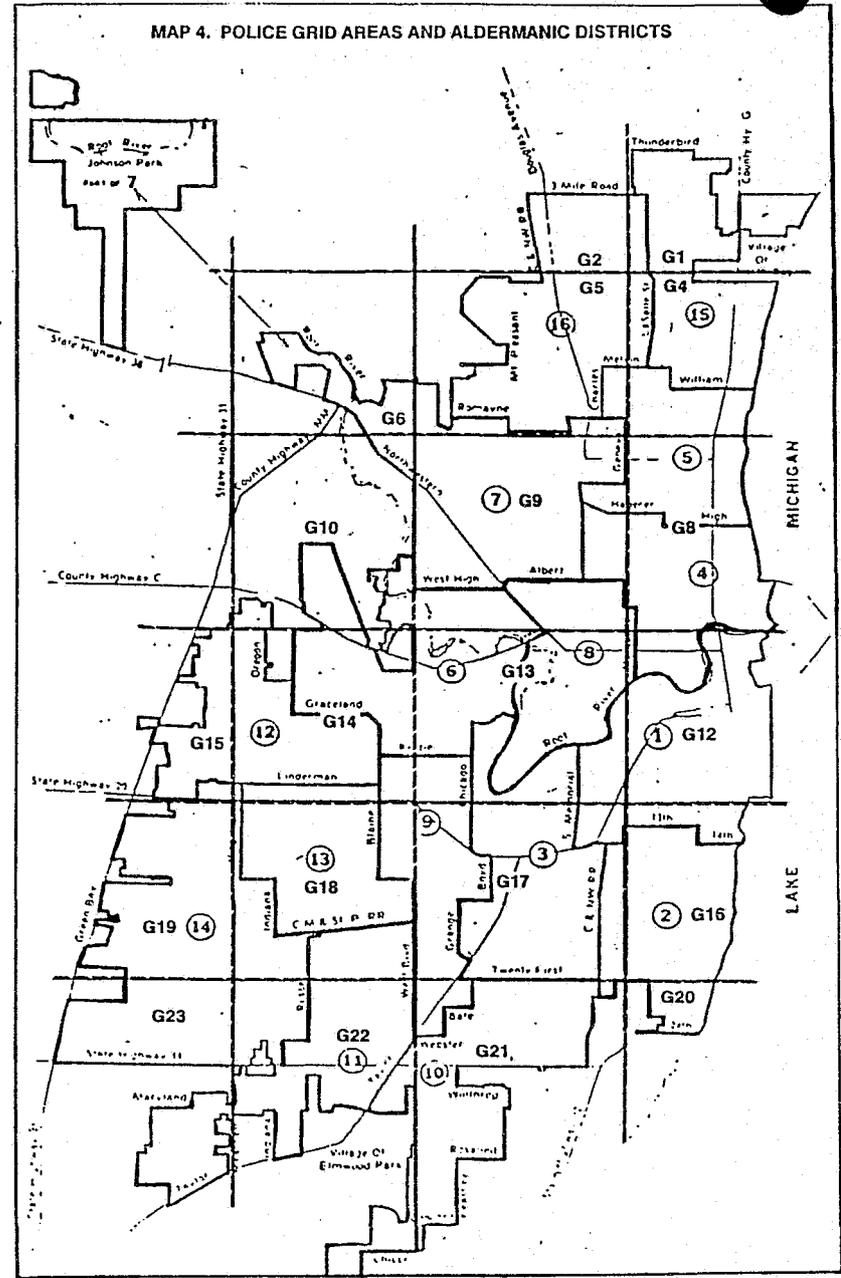
COMMERCIAL-INDUSTRIAL AREAS

PARKS AND PUBLIC USE

MAJOR TAVERN AREAS



MAP 4. POLICE GRID AREAS AND ALDERMANIC DISTRICTS



the years but have not put them together in the development of a social structure, social process framework for understanding delinquency and crime.

Seasonal Fluctuation in Rates

One of the phenomena which must be considered from any viewpoint that sees delinquency and crime as explained by the nature of human life is the degree to which rates fluctuate seasonally and the fact that variation on a seasonal basis may be as great or greater than that found in almost any Police Grid Area over a period of time. These fluctuations are shown in Plots 1 through 4 (1969-1979), taken from Shannon (1981). For example, the January and July differences in number of offenses committed in many years was as great or greater than the differences in number of offenses committed in January of 1969 and January of 1979 (Plot 1). In Police Grid Area 12 (Plot 2) the extreme inner city area, i.e., central business district and adjacent deteriorating area, seasonal fluctuation became greater and greater, particularly during peak years.

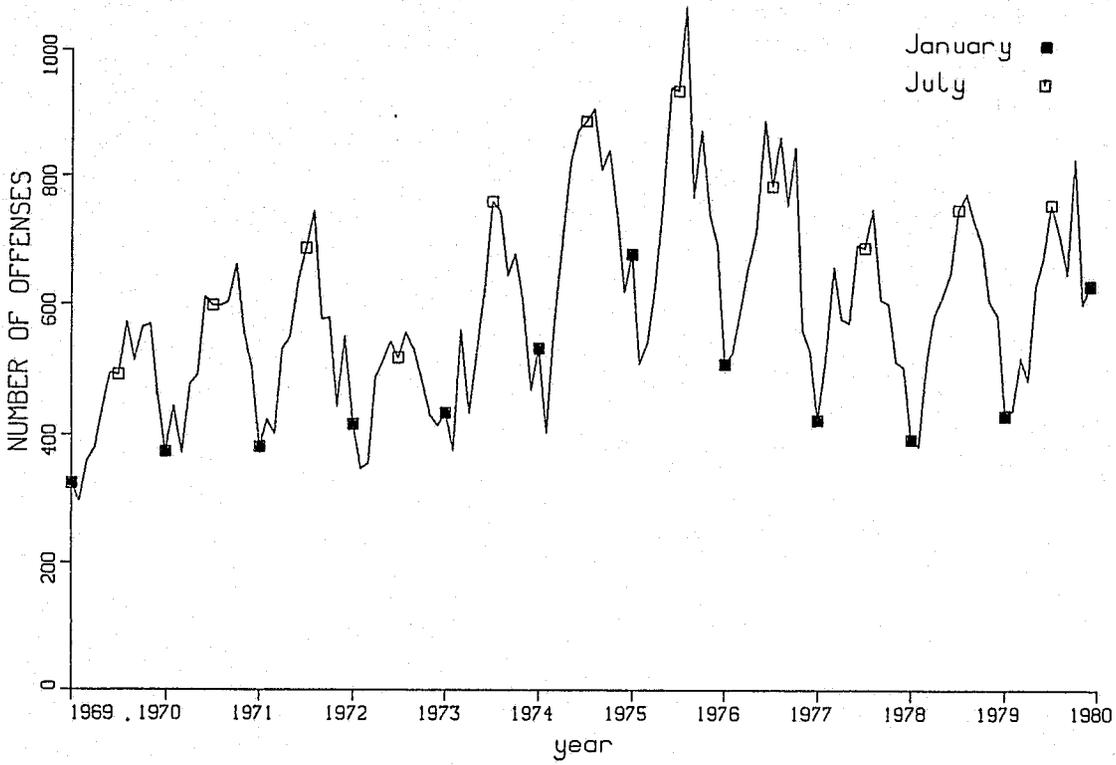
When fluctuations for the entire city were considered, there was no locational element or immigration from other areas to be considered. Fluctuations for Police Grid 12, however, were the product of offenses in the area not only by people who resided there but by the multitude of others attracted to the central business district as well. In short, the seasonal changes in how life is organized in urban areas has a significant effect on offense rates.

In an area with a smaller number of offenses, a high SES residential area (Police Grid 4 for example), the seasonal fluctuation is not as great in numbers but proportionately more apparent than in an inner city area such as Grid 12 (Plot 3). Essentially the same pattern of seasonal fluctuation is found for theft for the city and for Police Grids 12 and 4 (Plot 4) but there are also idiosyncrasies which point to crime as a product of interaction with one's immediate social environment, one's place of residence, place of work, and place of leisure time activities.

Although these seasonal fluctuations are not pertinent to the major focus of this report on offender types and drugs, they do reveal one aspect of the social nature of crime, i.e., not just how weather influences the propensity of people to engage in various types of offenses but how all activities have a seasonal nature, some more than others, and how they in turn add to the seasonal swings in miscreant behavior. Our major concern at this point, however, is whether or not temporal trends in delinquency and crime are related to the changing social organization of the city, more specifically how

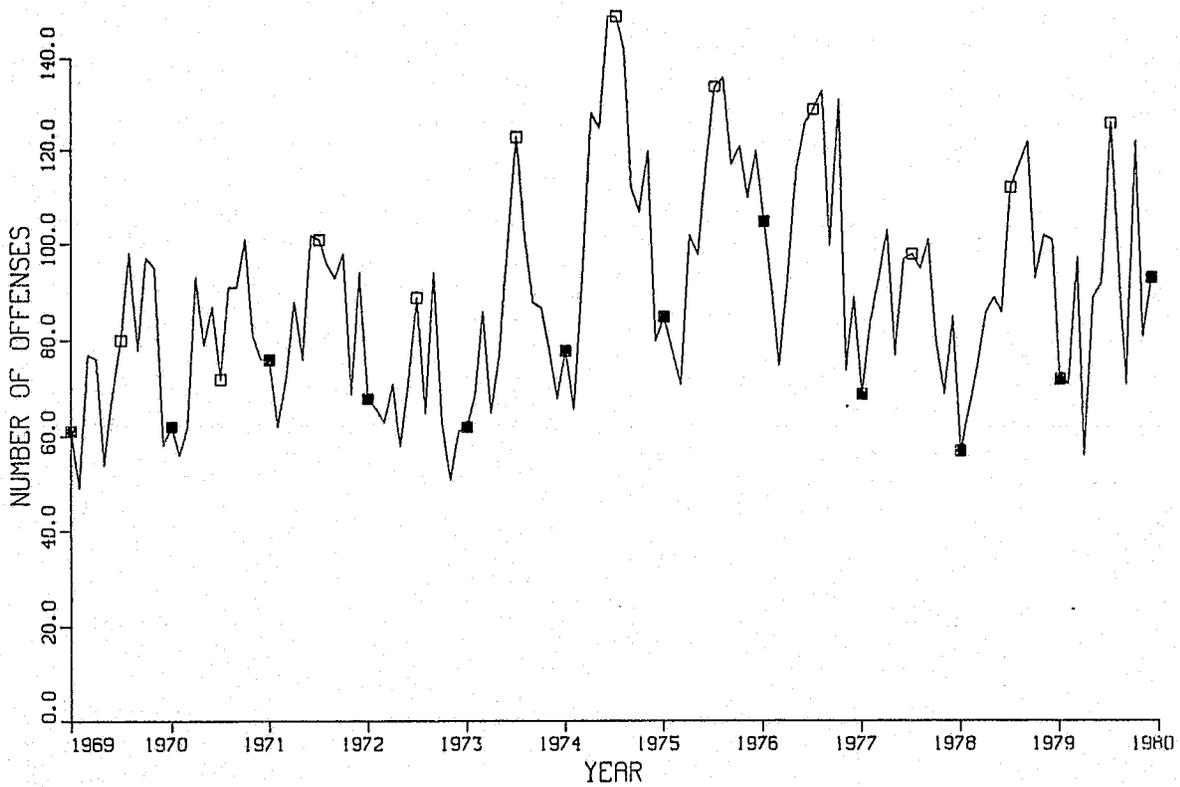
Plot 1

WHOLE CITY: OFFENSES - January, 1969 to December, 1979



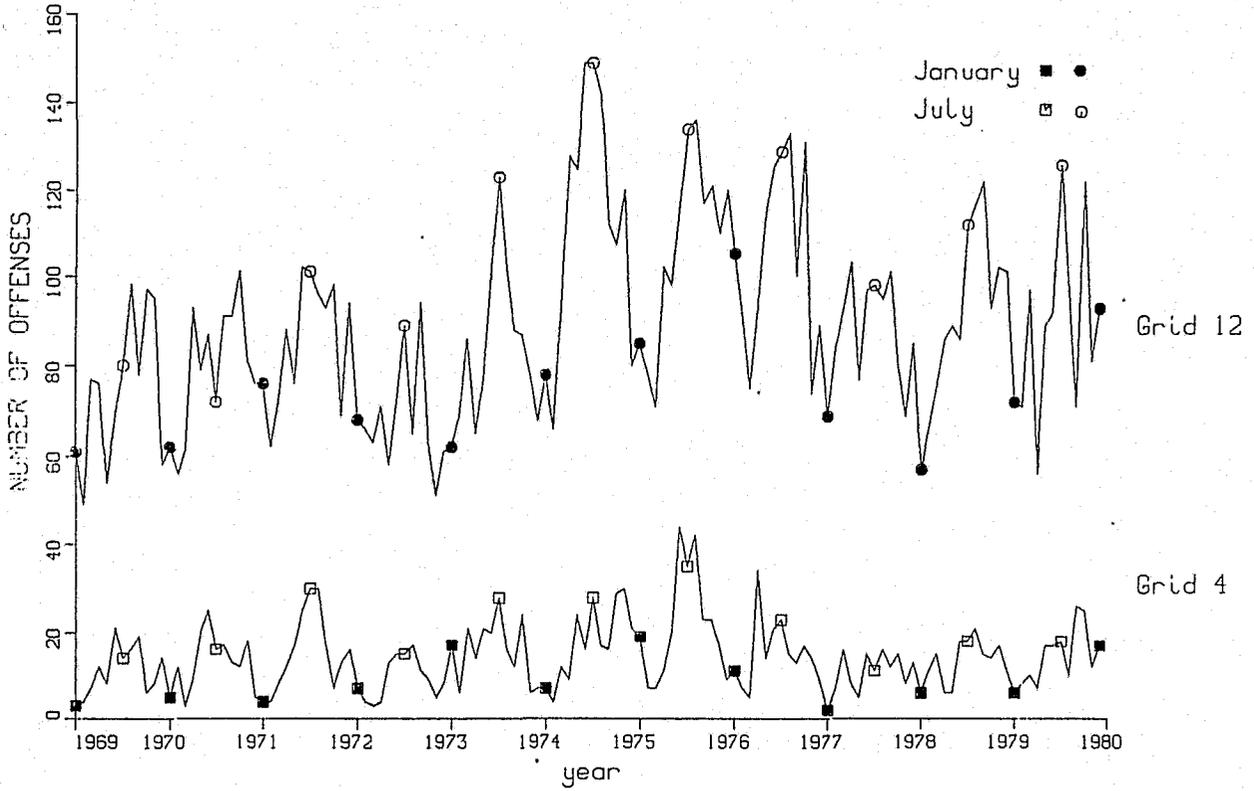
Plot 2

GRID 12: OFFENSES - JANUARY, 1969 TO DECEMBER, 1979



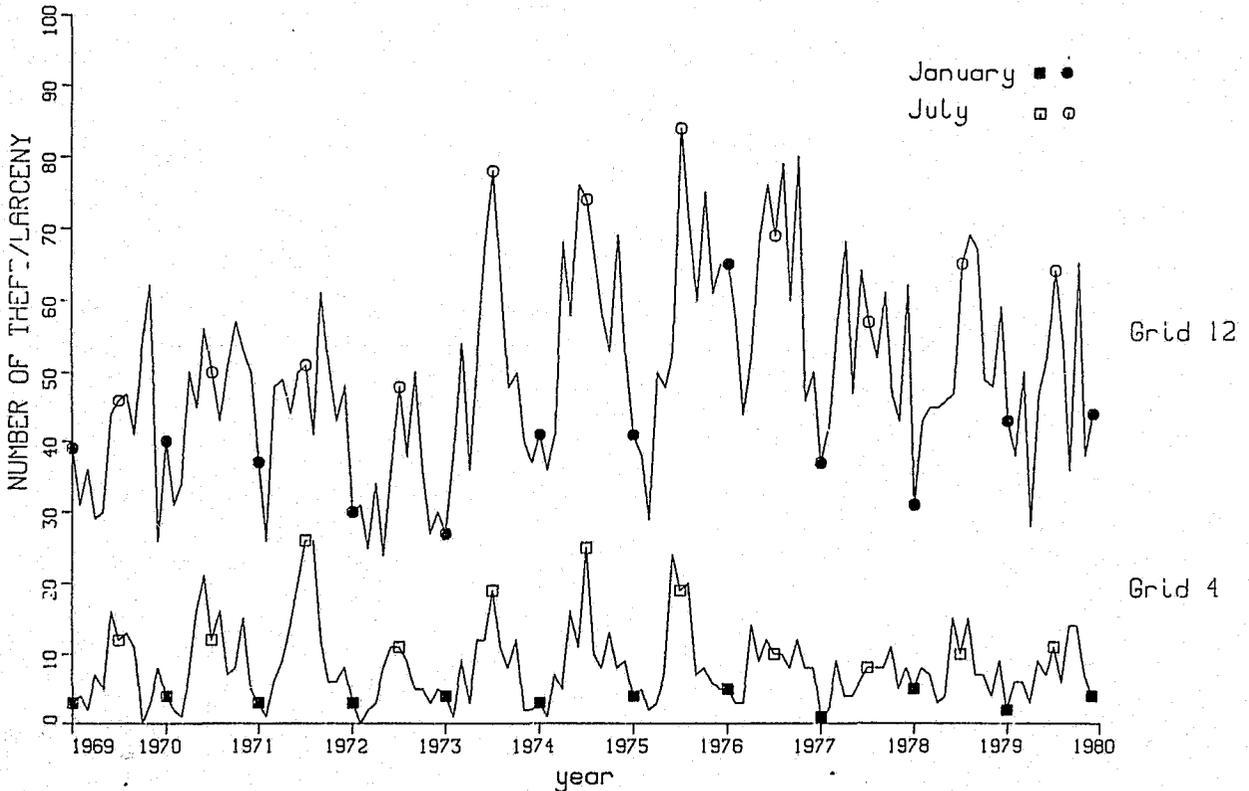
Plot 3

OFFENSES - January, 1969 to December, 1979



Plot 4

THEFT/LARCENY - January, 1969 to December, 1979



change in the characteristics of areas within spatial systems results in variation in offense patterns.

Temporal Trends in Offense Rates by Police Grid Areas/Aldermanic Districts

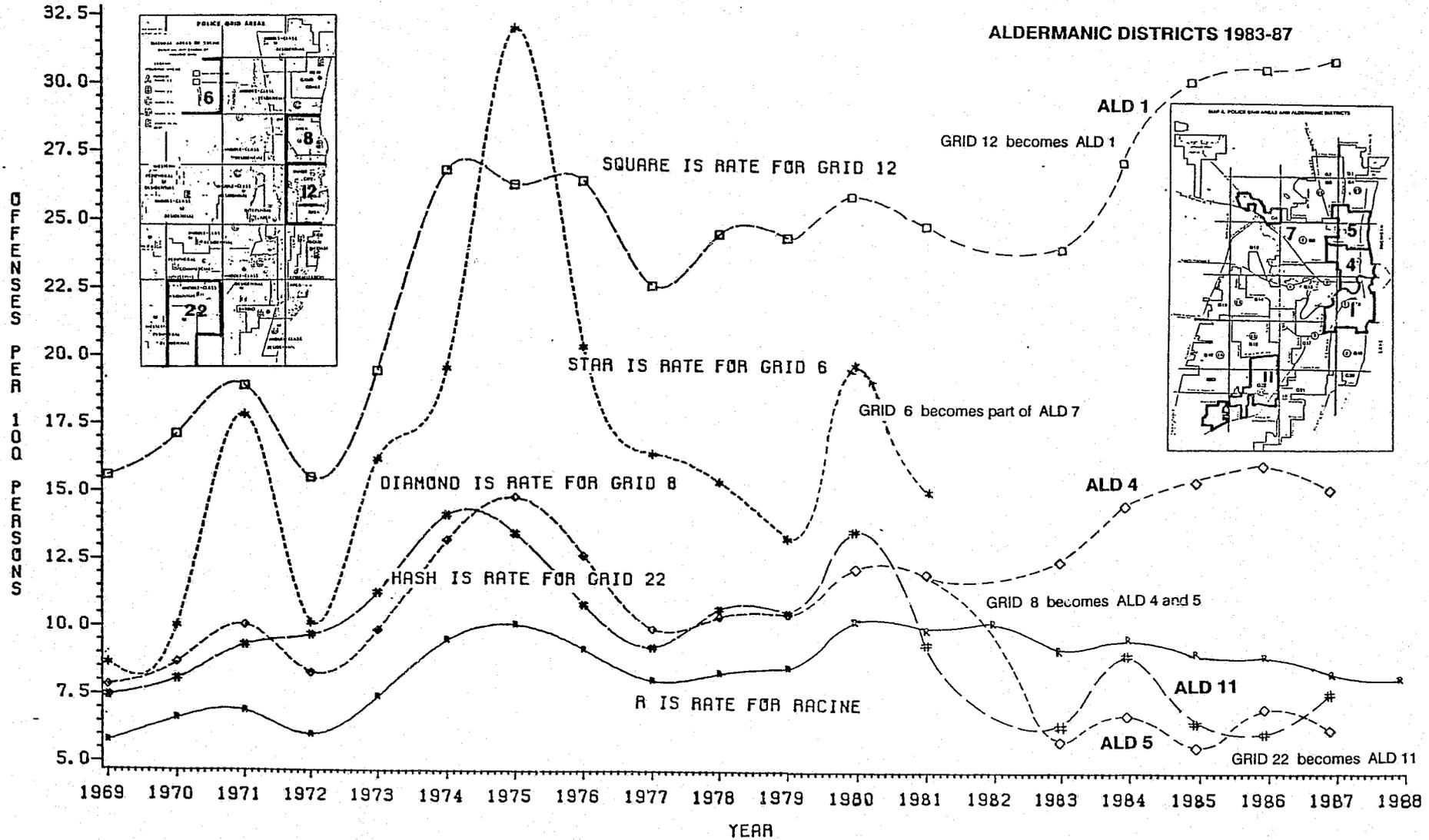
When Part I offense rates by Police Grid Areas were first considered, we found that offenses against the person and property were correlated .9047. Assault and rape were correlated .9211 and burglary and theft were correlated .8796, the latter being the two Part I offenses with the greatest frequency of occurrence, followed by assault. Although some of the less frequently occurring offenses have relatively low or inverse correlations with other offenses, it was decided that the basic trends for crime within areas were well represented by Part I offenses regardless of type.

Offenses against both property and persons first peaked in 1975 and then did so again in 1980 and 1981. Although most grid areas also had their first peak in 1975, two achieved their highest rate a year earlier, five a year later, and one of the 19 in 1977; several others have had more recent peaks in the 1980s. There were, of course, anomalies, some of which will be discussed as Graphs 1-4 are presented to show the nature of trends in various types of Police Grid Areas/Aldermanic Districts. The reader must realize that this presentation is not made simply for the purpose of showing how offense rates have changed in Racine. The main thrust of this section of the chapter and, for that matter, the entire chapter is to reveal how delinquency and crime have long been related to the social structure of the city and how changes in the structure of the city are followed by changes in offense rates in its variously contrived social areas.

Several Police Grid Areas displayed rates that were considerably above those for the city during the early years of the study, Grids 6, 8, 12, and 22 (Graph 1). A reduced version of Map 1 and Map 4 have been superimposed on Graph 1 in order that the reader be able to readily associate the Police Grids with their Aldermanic Districts which have replaced them in police reporting. Only two, Grids 8 and 12, are inner city, Grids 6 and 22 being peripheral, developing areas. Quarry Lake Park and its arterial location made Grid 6 an arena for recreation, delinquency, and crime. Its small resident population resulted in high and fluctuating rates of offenses in the area based on that residential population, one of the highest robbery, burglary, and assault rates in the city in 1975 and the highest theft rate in 1975 and 1976. Grid 22 (Aldermanic District 11) was also a peripheral area, a major recreational site, had a high target density, contained a larger population, and was not too readily affected by small but rapid changes in the number of police

GRAPH 1.

PART I, OFFENSES PER 100 PERSONS IN POLICE GRIDS 6, 8, 12, 22 AND RACINE



contacts in the area. Although its offense rate was originally higher than that for Racine, it has now declined and as Aldermanic District 11, is lower than that for the city. Several Aldermanic Districts or portions thereof (District 11, for example) will appear on more than one graph because they contain parts of more than one Police Grid Area. This has, of course, added to the complexity of the graphs and our account of changing offense rates.

Grid 12 (Aldermanic District 1) contains the Central Business District, areas of poor housing, the recreational waterfront, parks and public use areas, and is at least half commercial-industrial. Grid 8, on the other hand, with an offense rate almost identical to Grid 22, has been almost equally divided into Aldermanic Districts 4 and 5 with District 4 having a higher rate than District 5. Although both have large areas of relatively poor housing, District 4 having more commercial-industrial land use and District 5 having more parks and public use land, the quality of the housing as a proxy variable for SES (Map 3, Grids 8 and 12 and Tables 1 and 2 for details) and the general milieu in District 5 makes the offense rate differential seem reasonable.

We are now most interested in Grid 12/Aldermanic District 1 and Grid 8/Aldermanic District 4 and what has been happening in the neighborhoods which they more or less encapsulate. These are the inner city neighborhoods to which we have previously referred and to which we shall look in relating milieu to not only rates of delinquency and crime among those in the 1955 Cohort but their continuity in delinquency and crime as well.

The other two inner city Police Grids, 13 (Aldermanic District 8 and part of others) and 16 (Aldermanic District 2) are shown in Graph 2. Both had high target densities, poor housing, and high residential vacancies. These Grids and others included in Graph 2 had offense rates generally lower than the Grids included in Graph 1 during the early years of the study but several of which (Grids 9, 13, 16, and 17) are now among those Grids and Aldermanic Districts with the highest offense rates.

Taken together, Police Grids 12, 8, 13, and 16 (although the latter is somewhat different from 8 or 12 because it contains remnants of the Old Gold Coast, a considerable amount of very poor housing, but also an area of revitalization) are the Police Grid Areas containing most of the neighborhoods to which we referred when we spoke of the hardening of the inner city (Shannon 1986 and 1988). Police Grid 13, which had the second largest population of the grids, has become part of Aldermanic Districts 8 and 6, as well as 1, 3, and 7. Aldermanic District 8 had a very sharp offense rate rise in 1985,

GRAPH 2.

PART I OFFENSES PER 100 PERSONS IN POLICE GRIDS 5, 9, 13, 15, 16, 17, 19 AND RACINE

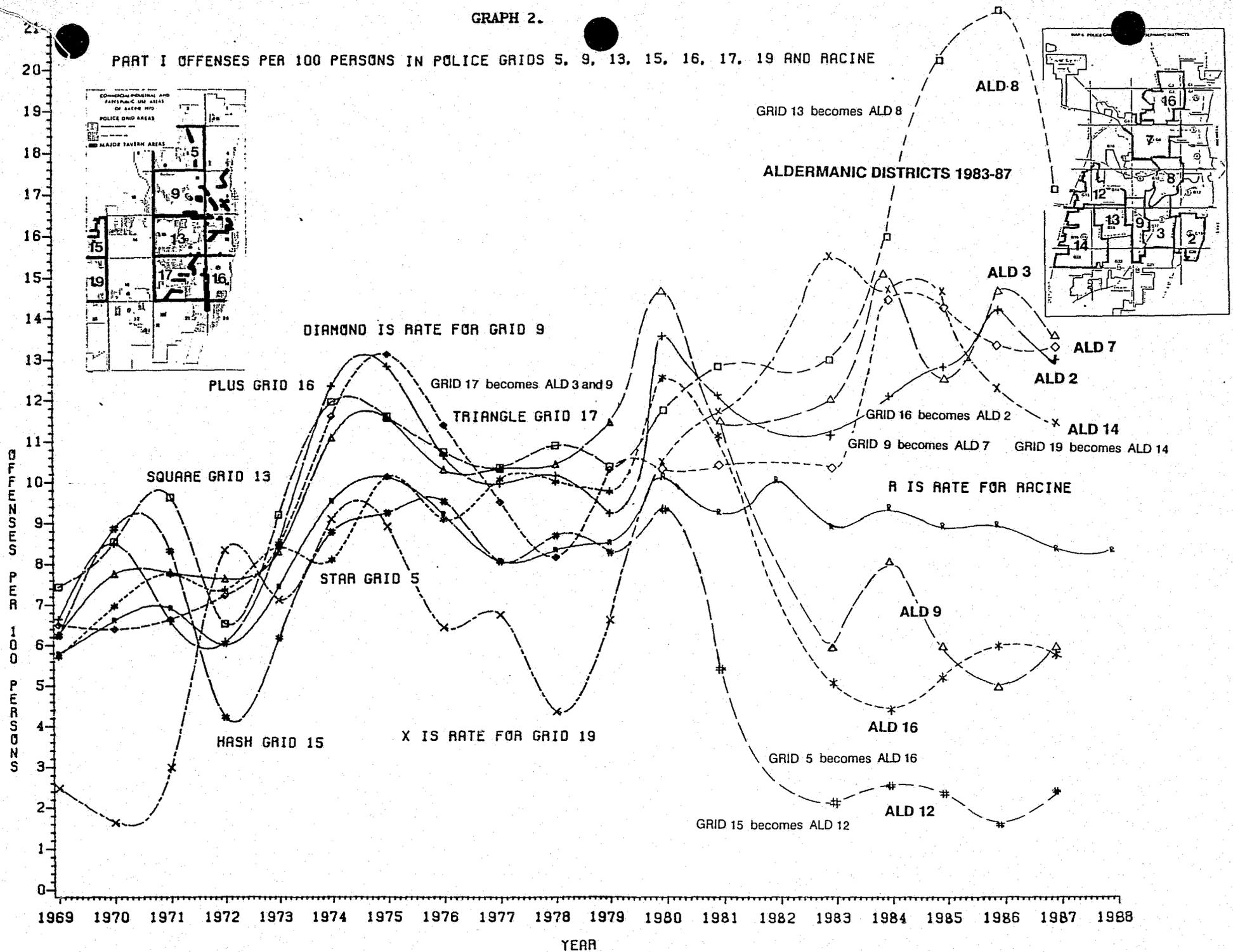


TABLE 2A. RELATIONSHIP OF TARGET DENSITY AND VACANT HOUSING TO CHANGE IN PART I OFFENSES COMMITTED IN POLICE GRID AREAS

Target Density & Trend 1950-1970	% Vacant Housing & Trend 1950-1970	Offense Rate & Trend 1969-1970
H i g h T a r g e t D e n s i t y		
8 Dec.	High Inc. to 5.59%	High Inc.
12 Dec.	High Inc. to 8.30%	High Inc.
16 Dec.	High Inc. to 7.83%	Med. Inc.
17 Dec.	Med. Inc. to 4.09%	Med. Inc.
(All had high tavern density.)		
M e d i u m T a r g e t D e n s i t y		
13 Dec.	High Inc. to 5.92%	High Inc.
9 Dec.	Med. Inc. to 3.89%	Med. Inc.
14 Stable	Med. Inc. to 2.10%	Low Stable
5 Inc.	Med. Dec. to 2.02%	Med. Inc.
22 Inc.	Low Dec. to -2.0%	Med. Inc.
2 Inc.	Low Dec. to -2.0%	Low Stable
15 Inc.	Low Dec. to -2.0%	Med. Inc.
20 Inc.	Too few blocks	Low Fluct.
(13, 9, and 20 had high tavern density; 14, 15, and 2 had no taverns.)		
L o w T a r g e t D e n s i t y		
6 Stable	Low Dec. to -2.0%	High Inc.
10 Stable	Low Dec. to -2.0%	Low Stable
4 Stable	Low -2.0%	Low Stable
18 Stable	Low -2.0%	Low Inc.
21 Stable	Low -2.0%	Low Stable
23 Stable	Med. 3.79%	Low Inc.
1 Stable	Low Dec. to -2.0%	Low Inc.
19 Inc.	Low -2.0%	Med. Inc.
(4, 18, and 21 had low tavern density; 1 and 19 had no taverns; 6, 10, and 23 had no targets.)		

TABLE 2B. OBSERVED AND HYPOTHESIZED OFFENSE RATES AND TRENDS IN POLICE GRID AREAS

Expected Rate and Trend Based on Population and Housing Characteristics and Change 1950-1980	Observed Rate and Trend: Official Police Records 1969-1979
I n n e r C i t y	
8 High Inc.	High Inc. to 1975
12 High Inc.	High Inc.
13 High Inc.	Med. Inc.
16 High Inc.	Med. Inc. to 1975
T r a n s i t i o n a l	
9 Med. Inc.	Med. Inc. to 1975
17 Med. Inc.	Med. Inc.
20 Med. Inc.	Low Fluct.
S t a b l e R e s i d e n t i a l	
18 Med. Stable	Low Inc.
21 Med. Inc.	Low Stable
14 Low Stable	Low Stable
4 Low Stable	Low Stable
P e r i p h e r a l M i d d l e t o H i g h S E S	
5 Med. Stable	Med. Inc.
6 Med. Inc.	High Inc. to 1975
22 Med. Inc.	High Inc. to 1974
19 Low Inc.	Med. Inc., Fluct.
15 Low Inc.	Med. Inc., Fluct.
23 Low Inc.	Low Inc., Fluct.
P e r i p h e r a l H i g h S E S	
1 Low Stable	Low Inc., Fluct.
2 Low Stable	Low Stable
10 Low Inc.	Low Stable

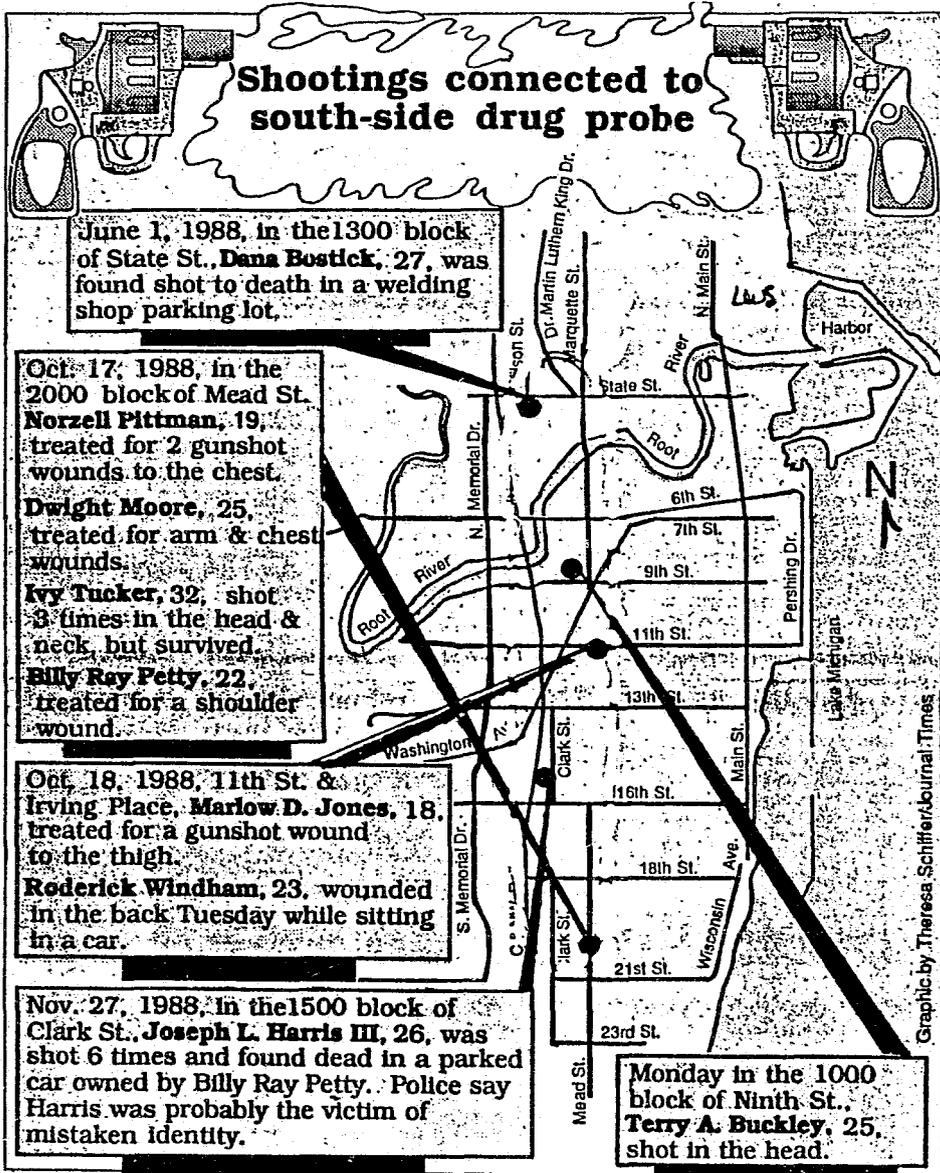
Aldermanic District 14. The latter contains a commercial-industrial area and poor housing that was located in Grid 18 and it now has an offense rate considerably above that for the city. Grid 15, now the Western half of Aldermanic District 12, which also contains much of middle class, residential Grid 14, has had a declining offense rate and the area has become one of the lowest in the city. Grid 5 (Aldermanic District 16) also has had a relatively low but fluctuating offense rate in recent years. Thus it is apparent that, although the seven Police Grid Areas shown on Graph 2 were arrayed around the mean for Racine during the 1970s, they varied considerably during the 1980s ranging from very low to relatively high police contact rates. We must, however, be cautious about the final word on some Police Grids which have been divided so as to fall in several Aldermanic Districts, pending the opportunity to obtain better estimates of their populations by working backward from the 1990 Census.

What we would expect, if drug offenses follow the pattern of other crime, is a concentration of them in Police Grids 12, 8, 13, and 16, followed by Grids 9 and 17. As shown by Map 3, most of the city's taverns and cocktail lounges are located within these grids. All of the shooting described in a Racine Journal-Times account, January 4, 1989, took place in or on the edge of Grids 12 and 16.

On the other hand, while classical theory (the Chicago School as represented by Park, Burgess, McKenzie, Shaw, and McKay and others) led us to hypothesize a set of rates for Police Grid Areas consistent with their demographic and social characteristics, Table 2B indicates that predicted rates and trends were closely correlated only at extremes of the ecological continuum. It is for this reason that we have been so concerned about rates and trends for various sets of spatial units as a preface to our closer examination of offender types and trends with specific reference to the role of alcohol and drugs.

Graph 3 contains grids which are predominantly middle-class residential and which were, during the early part of the study, considerably below the rate for Racine. All continue to have lower rates, as do their closest approximations in Aldermanic Districts.

The last graph in the series, Graph 4, contains three Police Grid Areas, all of which were more or less on the periphery of the city and at least stable, middle SES areas. Grid 10 had a small population and a low offense rate early in the study but the rate increased as Aldermanic District 6. Grid 21 (Aldermanic District 10), one of the six largest grids in population, was



Police reassigned to fight drug war

WEDNESDAY, JANUARY 4, 1989

By Laura J. Merisalo
Journal Times

An alleged drug feud stained by three murders prompted Racine police to bolster their four-member street crimes unit to 10, Racine Police Chief Karl Hansen said Tuesday.

"This drug situation is going out of control," Hansen said. "It's escalating at unbelievable proportions."

Hansen's announcement to reassign six people came on the heels of the Monday shooting death of Terry A. Buckley, 25, of 1006 Pearl St., who was killed by a bullet to the head.

But Hansen said he planned to strengthen the street crimes unit before Buckley's death.

Shootings allegedly linked to drugs — particularly cocaine — started in early summer with shots being fired at cars and houses, according to police.

"It's gone from shootings. It's gone to death," Hansen said. "They're killing them now ... (so) we're beefing up our attack on drugs."

The June 1 shooting death of Dana Bostick, 27, of 1909 Howe St., was the first murder allegedly tied to a dispute between drug-dealing factions, Hansen said.

Bostick's body was found in the Viking Welding lot, 1331 State St., where he collapsed after gunshots rang out at the corner of State and Wilson streets, police said.

Six months later, the body of Joseph Harris III, 26, of 851 Washington Ave., was found curled up on the front seat of a car parked in the 1500 block of Clark Street Nov. 27.

Authorities said Harris was shot six times at close range, with the fatal wound being to the heart.

His body was found in a car that

Shooting victim may be drug war's ninth

A Racine man shot Tuesday while sitting in a car parked in front of 1101 Irving Place may be the ninth victim in a drug battle that erupted in gunfire early last summer, Racine police said.

Roderick C. Windham, 23, of 2062 Charles St., suffered a gunshot wound to the back when a man opened fire at the car he was in shortly after 12:45 p.m., Racine police said.

They couldn't say if Windham, who was in the front passenger seat, was alone or with others in the car.

This story was compiled by Journal Times reporters Laura J. Merisalo, Gary Metro and Sara Lamb.

Windham's shooting may be tied to the fatal shooting Monday of Terry A. Buckley, 25, of 1006 Pearl St., and it may be in retaliation for Buckley's death, according to police.

They said Windham was treated at St. Mary's Medical Center, but a spokeswoman denied he was a patient there.

Windham's wound was not fatal, according to police.

Meanwhile, police said they used a warrant to search a home at 1104 Villa St. shortly after 6 p.m. Tuesday and seized 29 packets of cocaine, with a street value of \$580, and \$439 cash.

Paula M. Williams, 25, who lives at 1104 Villa, was arrested on a charge of possession of cocaine with intent to deliver and a misdemeanor charge of altering identification numbers.

Police said they found electronic equipment in the home with defaced identification numbers.

(Please turn to VICTIM, Page 2A)

belonged to one of four men injured by gunshots in a midnight shooting spree Oct. 17 in the 2000 block of Mead Street.

Harris may have been a victim of mistaken identity, according to police.

On Oct. 18, Marlow D. Jones, 18, of 1108 Villa St., was shot in the thigh at 11th Street and Irving Place, according to police.

Buckley was charged with caus-

ing injury by conduct regardless of life in the Jones shooting.

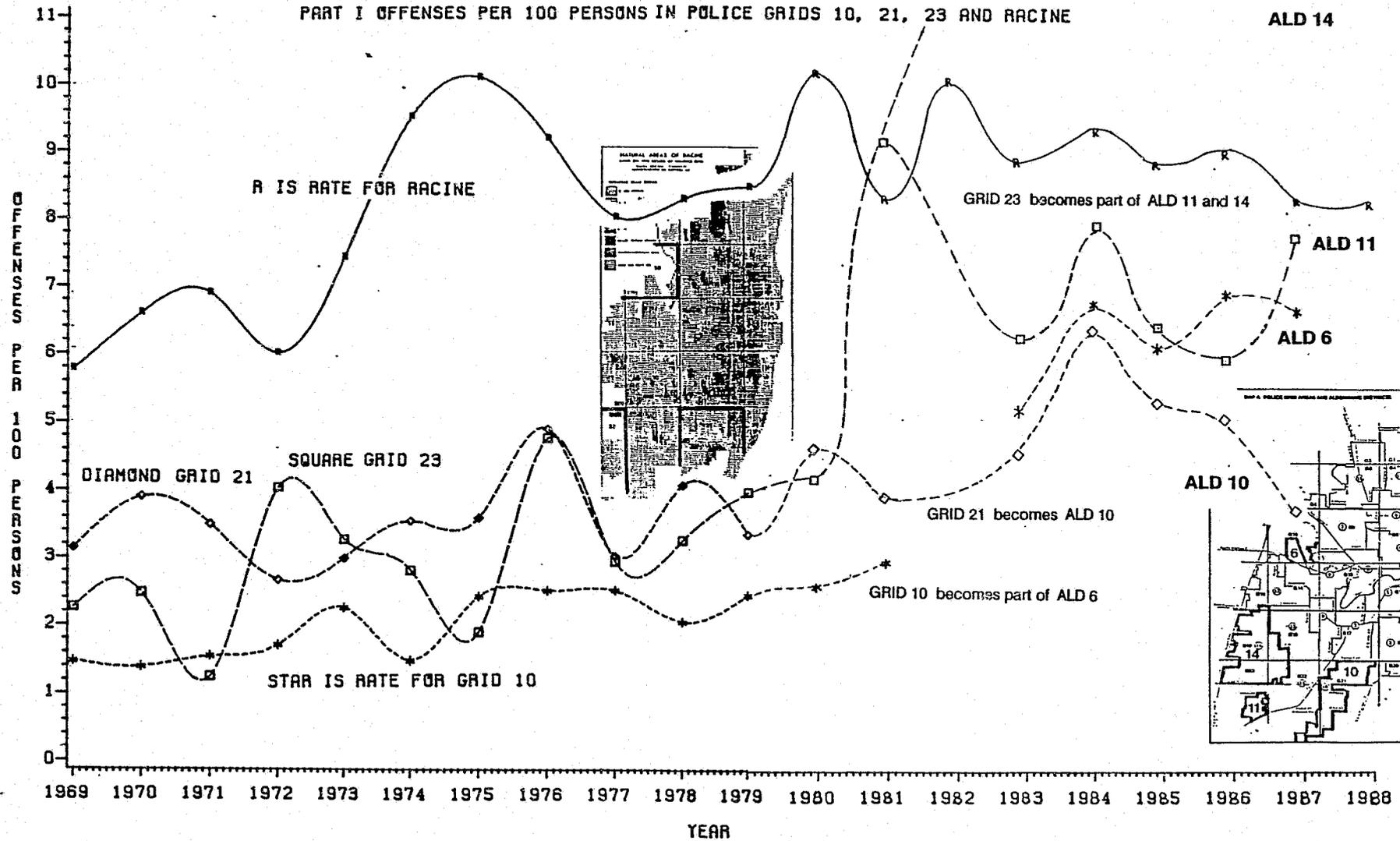
That arrest was the only one made by police in connection with the alleged drug-related shootings, however others have been arrested on drug counts and charges are pending against them in court.

The October shootings came at the height of a nearly seven-month-long investigation by state and local

(Please turn to POLICE, 2A)

GRAPH 4.

PART I OFFENSES PER 100 PERSONS IN POLICE GRIDS 10, 21, 23 AND RACINE



adjacent to an unincorporated area that included the barrio. Its offense rate was low during early years of the study, it had a later peak than the other grids, and is still a comparatively low rate area. Grid 23 became part of Aldermanic District 11 and 14. District 14 experienced a large increase in its rate in 1981 because there was a sharp increase in theft.

Neighborhoods as Homogeneous Areas and Their Relation to Police Grid Areas and Aldermanic Districts

In summary, however, regardless of the changes taking place in rates within Police Grid Areas and their closest approximate Aldermanic District, all that we know about drugs suggests that the neighborhoods with the highest official offense rates, offenses involving drugs, and drug offenders themselves, should be within Police Grids 8, 12, 13, and 16, spilling over into Grids 9 and 17. Since we do not have cohort data by Aldermanic Districts, this roughly translates into inner city Neighborhoods 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, and 17, as shown on Maps 5 and 6. Neighborhoods 7 through 13 and 17 had high rates of all-around street offenders for the 1955 Cohort. There are, of course, several interstitial or transitional neighborhoods adjacent to the inner city neighborhoods (18 and 16 for example) and adjacent to that predominantly commercial-industrial area, Neighborhood 66 (54, 49, and 46, for example), which also had high offense or drug rates. The same may be said for several peripheral neighborhoods adjacent to commercial-industrial development or public use areas.

Although we have placed considerable emphasis on the hardening of the inner city, we have also shown (Shannon 1981 and 1984a) that Racine has, as have other urban, industrial communities, followed a less than perfect set of concentric circles (as did Hoyt, 1939) as it developed. Deviations in patterns of land use and population composition have been followed by variations in delinquency and crime patterns. Perhaps the best and most recent discussion of what this, i.e., empirical studies of the ecology of delinquency and crime, means for classical ecological theory or for perhaps theories of delinquency and crime may be found in Bursik (1988).

In order to focus the reader's attention on the relationship of the neighborhood system, which we concluded to be best for analytic purposes, to Aldermanic Districts and the relationship of both to high offense rates, two additional and final maps are included in this chapter.

Map 7 is a composite based on six computer maps which showed the concentration of felony-level police contacts by cohorts by place of contact and place of residence. The major high crime neighborhoods were those which

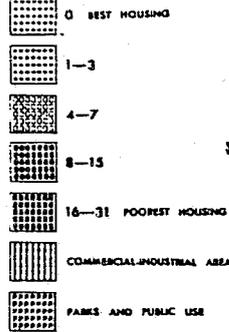
MAP 5

NATURAL AREAS OF RACINE

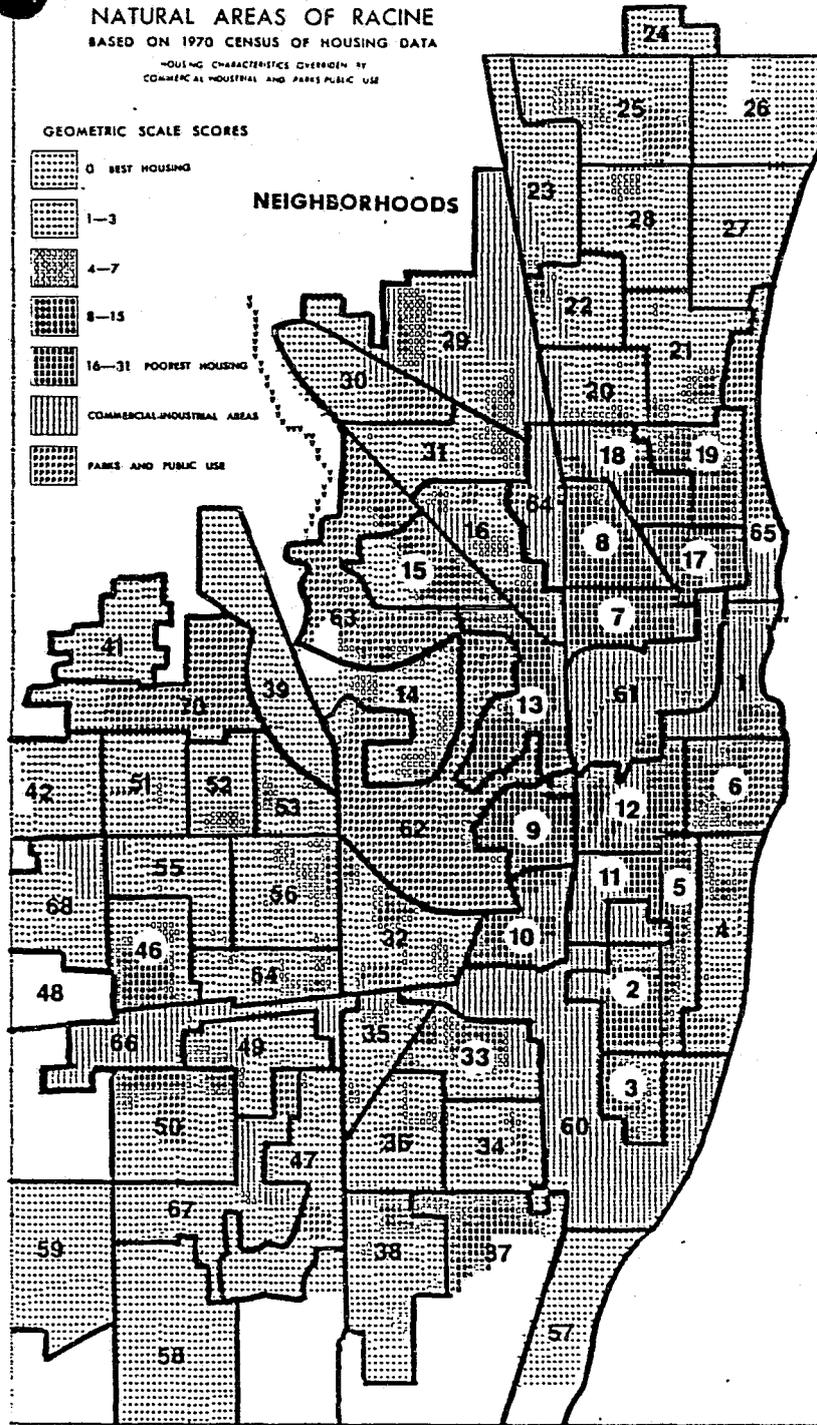
BASED ON 1970 CENSUS OF HOUSING DATA

HOUSING CHARACTERISTICS OVERLAIN BY
COMMERCIAL INDUSTRIAL AND PARKS PUBLIC USE

GEOMETRIC SCALE SCORES



NEIGHBORHOODS

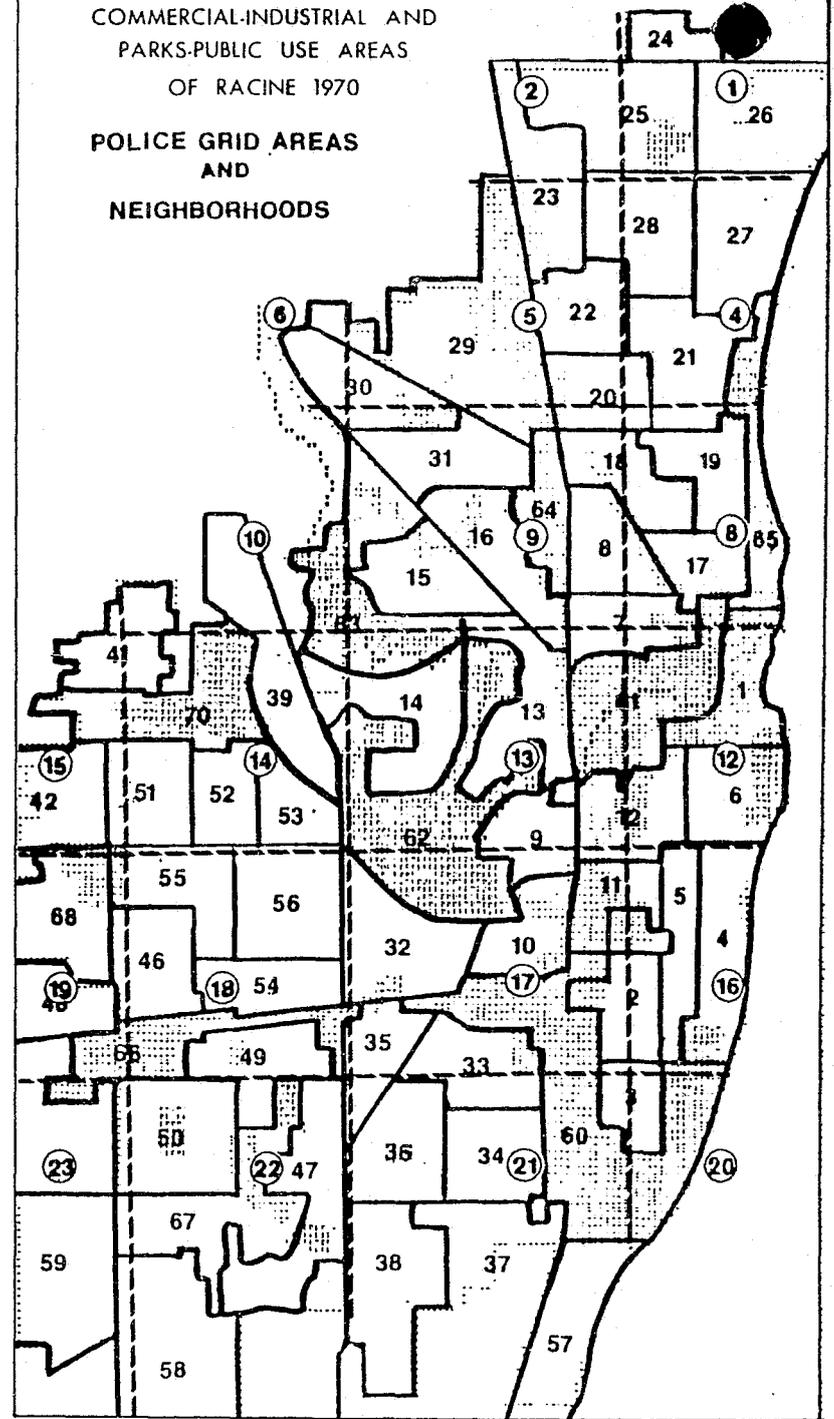


MAP 6

COMMERCIAL-INDUSTRIAL AND
PARKS-PUBLIC USE AREAS

OF RACINE 1970

POLICE GRID AREAS
AND
NEIGHBORHOODS

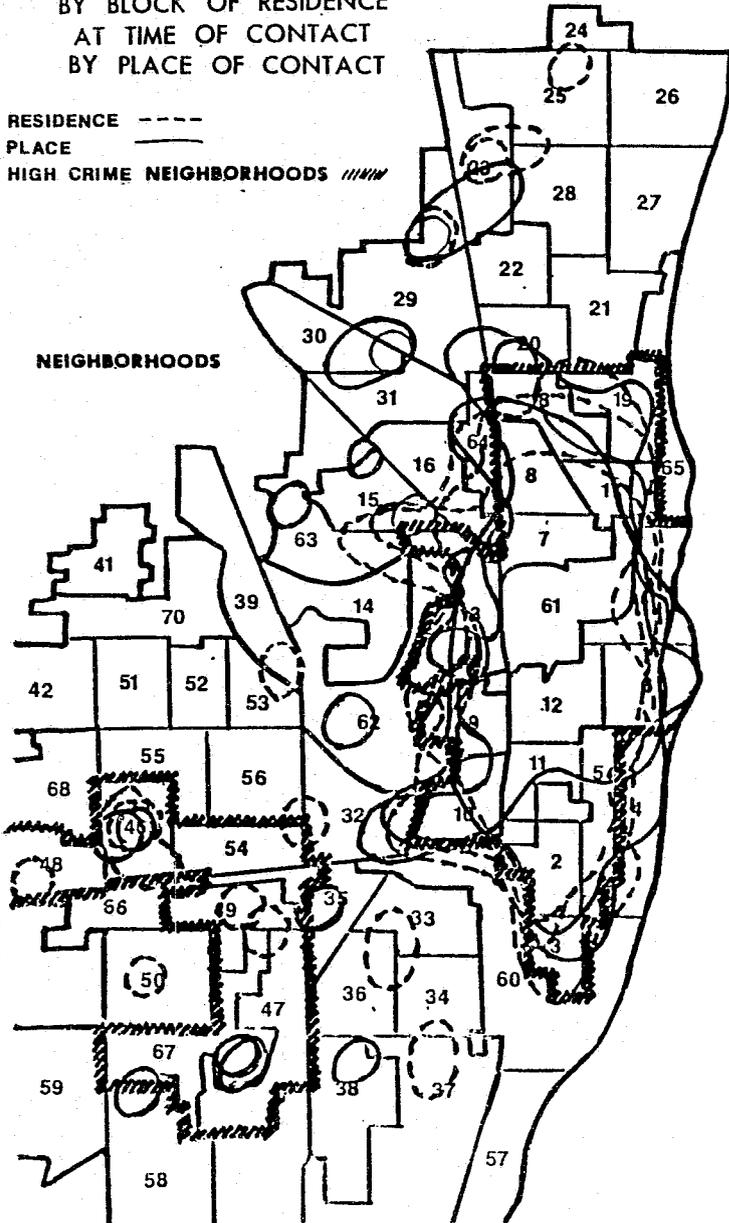


MAP 7

DISTRIBUTION OF FELONY CONTACTS
BY BLOCK OF RESIDENCE
AT TIME OF CONTACT
BY PLACE OF CONTACT

RESIDENCE - - - -
PLACE _____
HIGH CRIME NEIGHBORHOODS // // // //

NEIGHBORHOODS

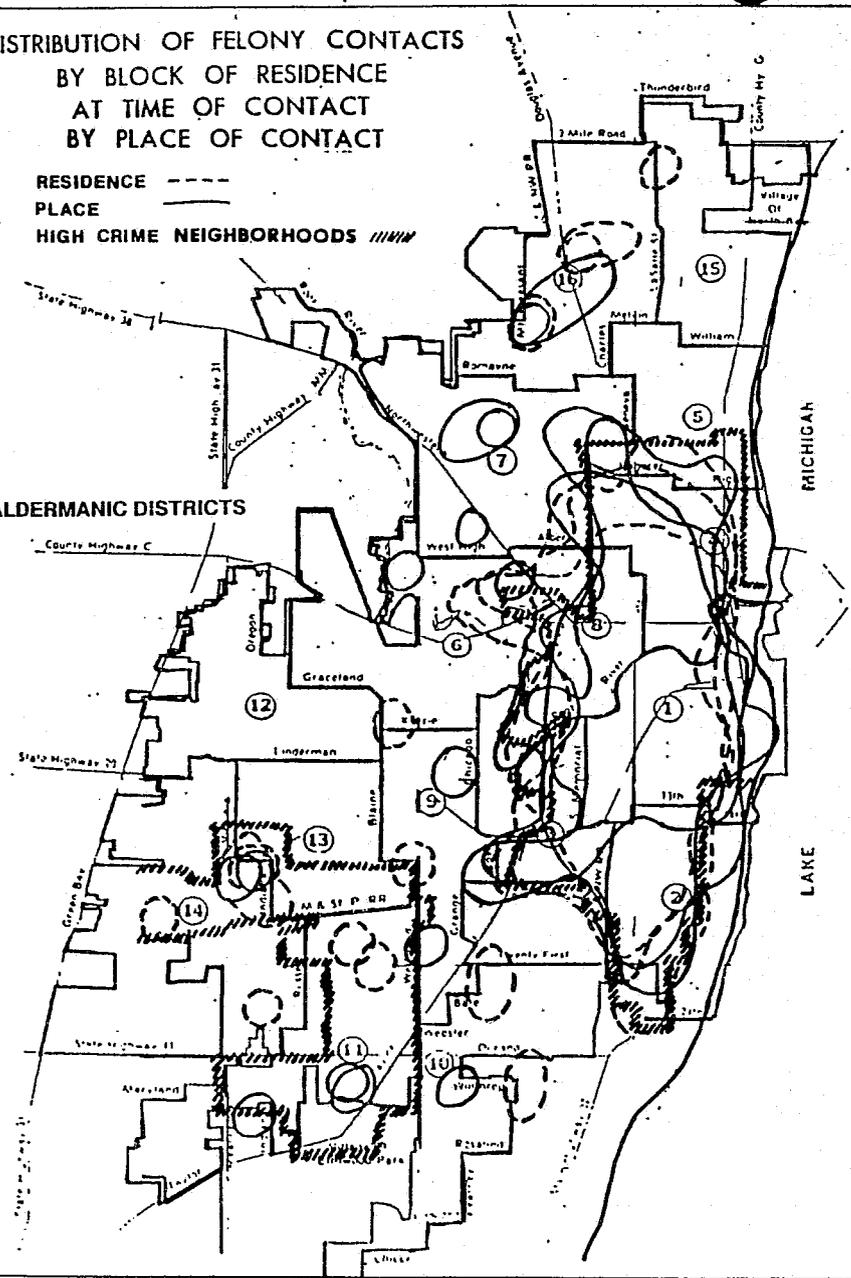


MAP 8

DISTRIBUTION OF FELONY CONTACTS
BY BLOCK OF RESIDENCE
AT TIME OF CONTACT
BY PLACE OF CONTACT

RESIDENCE - - - -
PLACE _____
HIGH CRIME NEIGHBORHOODS // // // //

ALDERMANIC DISTRICTS



we had listed as inner city, portions of several adjacent neighborhoods, and several peripheral neighborhoods adjacent to a large commercial-industrial area on the Southwestern edge of Racine. Map 8 is similar but the high felony-level offense areas are overlaid on Aldermanic Districts. These areas include inner city Aldermanic Districts 1, 3, 4, and 8 and portions of peripheral Aldermanic Districts 11, 13, and 14.

We have now set the stage for an examination of the extended 1955 Cohort data within an ecological framework of reference, a structural framework which will give us at the very outset a better idea of differences in the relationship of types and patterns of delinquency and crime to drug use/offenders among various elements of the population at various periods in their life cycle or age periods of their careers.

Chapter 4

EXTENDING OFFICIAL RECORDS OF THE 1955 COHORT AND A NEW COMPARISON OF COHORT DIFFERENCES

Introduction

This chapter will hold little excitement for those who are waiting for an answer to the causes of delinquency and continuity into crime or the delinquency/crime and drug connection that might be obtained by extending the official careers of the 1955 Cohort. Before these questions may be addressed we must examine the new data at some length. This chapter will, however, present considerable information for those who are interested in the problem of attrition in longitudinal studies. In fact, the whole cost of the enterprise is worth the results that we shall report in the next few pages.

Let us commence by turning to several tables from previous reports to the National Institute of Justice or the National Institute of Juvenile Justice and Delinquency Prevention. The first panel of Table 1 presents the race/ethnic|sex composition of the three birth cohort samples. They were fairly evenly balanced by sex but each cohort was predominantly White, although decreasing in the proportion White from cohort to cohort.

The second panel of the table includes only those who had continuous residence in Racine according to our definition. Note that the male-female proportion was less balanced and that cohort by cohort there were even fewer Whites proportionately. The proportion of Whites among those with continuous residence declined even further between 1976 and 1988 for the 1955 Cohort. The proportion of Blacks and Chicanos had increased cohort by cohort among those with continuous residence.

In the third panel of Table 1 we see that as of 1976, 80.3% of the 1955 Cohort had continuous residence, in comparison with 46.8% of the 1942 Cohort and 61.8% for the 1949 Cohort. In the last column of Table 1 we see that between 1976 and 1988 the picture had markedly changed. During the 12-year period between 1976 and 1988, additional cohort members were lost so that only 63.1% of the cohort members with continuous residence as of 1976 now had continuous residence. That left only 50.3% of the original 1955 Cohort with continuous residence. Note that the proportions of the 1955 Cohort Blacks and Chicanos with continuous residence were reduced less by attrition than were those for the Anglos. Lest the reader be discouraged by the loss of 1955 Cohort members with continuous residence, the 1955 Cohort still has a larger proportion with continuous residence than does the 1942 Cohort and almost as

TABLE 1. BASIC CHARACTERISTICS OF THE 1942, 1949, AND 1955 COHORTS AND PERCENT OF PERSONS WITH CONTINUOUS RESIDENCE IN RACINE IN 1976* AND 1988**

Cohort	Males				Females				Total			
	1942	1949	1955		1942	1949	1955		1942	1949	1955	
			1976	1988			1976	1988			1976	1988
Number	679	1081	1369		673	1018	1307		1352	2099	2676	
% by Sex	50.2	51.5	51.2		49.8	48.3	48.8					
% White	94.1	90.1	86.4		94.8	91.5	88.4		94.4	90.7	87.4	
% Black	4.6	6.8	9.1		3.0	5.8	8.4		3.8	6.3	8.8	
% Chicano	1.3	3.2	4.5		2.3	2.7	3.1		1.8	2.9	3.8	
Total	100.0	100.1	100.0		100.1	100.0	99.9		100.0	99.9	100.0	
Continuous Residence												
Number	356	740	1114	717	277	557	1035	640	633	1297	2149	1357
% by Sex	56.2	57.1	51.8	52.8	43.8	42.9	48.2	47.2				
% White	94.9	91.5	86.3	84.7	96.4	91.2	88.6	86.6	95.6	91.4	87.4	85.6
% Black	4.2	5.9	9.5	10.9	1.8	7.0	8.3	9.8	3.2	6.4	8.9	10.4
% Chicano	.8	2.6	4.2	4.5	1.8	1.9	3.1	3.6	1.3	2.2	3.7	4.1
Total	99.9	100.0	100.0	100.1	100.0	100.0	100.0	100.0	100.1	100.0	100.0	100.1
Percent of Category with Continuous Residence												
% Total	52.4	68.5	81.4	64.4	41.2	54.7	76.7	61.8	46.8	61.8	80.3	63.1
% White	52.9	69.5	81.2	63.2	42.0	54.6	79.3	60.4	47.4	62.2	80.3	61.8
% Black	48.4	59.6	84.8	73.6	25.0	66.1	78.2	73.3	39.2	62.4	81.7	73.4
% Chicano	33.3	59.5	77.0	68.1	33.3	35.7	78.0	71.9	33.3	47.5	77.5	69.6

* Absent from Racine no more than three years during the age period 6 through the original cut-off date for that cohort.

** Continuous Resident of Racine in 1976 and absent from Racine no more than three years between 1976 and 1988.

many as the 1949 Cohort. Our definition of continuous residence may have been too stringent and, for that reason; we have also constructed a 1955 Cohort consisting of those with continuous residence from age 13 to age 33. It will be presented at a later point in this report.

Many members of the 1955 Cohort are now in other states from New York to California, elsewhere in Wisconsin, in foreign countries, have unknown whereabouts, or, if still in Racine, have been out of the city long enough to not be considered continuous residents, i.e., absent for more than three years during the older adult period, age 21 or over. We must make it clear that we do know the whereabouts of most members of the 1955 Cohort who no longer live in Racine. The bulk of those who are not in Racine left after high school or college because they believed that employment opportunities were better elsewhere or because their spouse was pursuing employment opportunities elsewhere.

Although we had earlier found that those who were not continuous residents were not significantly different from those who were continuous residents, we believed that a comparison of them should be made. Table 2 is based on the 1,357, 1955 Cohort members with continuous residence in 1988 and the 803, 1955 Cohort members who were no longer continuous residents but had been continuous residents in 1976. While comparing the two groups one must remember that we are aware of the place of residence of a large proportion of those who are no longer in the community and that telephone conversations gave the impression that they had made successful adjustments in their new communities. Whether they have had more than the occasional traffic ticket we do not know. Our hypothesis was that those who left had had fewer police contacts and less serious reasons for police contacts during the age periods 6-17 and 18-20 than had those cohort members who remained in the community. In other words, the continuous residence sample would have more contacts and more Part I contacts per person than did those who left the community. This turned out to be the case for both age periods for which the continuous and non-continuous residents could be compared.

The Changing Distribution of Offenses in Racine

When we turn to Table 3 we see that the total distribution of specific offenses for the 1955 Cohort as of 1988 has changed for members with continuous residence from those who had continuous residence in 1976. The major changes in these distributions are blocked off to facilitate the comparison of changes by early age periods with the figures presented for age 21+ and the total. Most noticeable is the increased proportion of police

TABLE 1. DISTRIBUTION OF POLICE CONTACTS BY TYPE FOR 1955 COHORT MEMBERS WITH CONTINUOUS RESIDENCE IN RACINE IN 1976 AND 1988 AND WITH NON-CONTINUOUS RESIDENCE IN 1988

	Ages 6-17		Ages 18-20		Ages 21+		Total	
	CONT	NONC	CONT	NONC	CONT	NONC	CONT	NONC
Traffic	9.4	10.3	31.6	28.3	42.0	31.6	23.4	17.8
Disorderly Conduct	14.5	15.6	27.5	26.5	21.3	27.7	19.3	20.0
Suspicion, Investigation	15.1	15.0	12.5	11.5	7.3	10.9	12.4	13.5
Liquor	2.5	2.4	2.1	2.9	1.6	1.8	2.2	2.4
Theft	12.7	13.8	5.6	7.7	5.0	6.1	9.0	11.2
Incorrigible, Runaway, Truant	27.9	23.9	.3	.6	----	----	14.0	14.7
Vagrancy	1.6	1.5	.6	.4	.4	1.5	1.0	1.2
Auto Theft	2.2	2.9	1.3	1.4	.2	----	1.4	2.1
Sex Offenses	.8	1.1	1.5	1.4	1.1	1.8	1.0	1.3
Assault	2.5	2.1	2.6	2.3	5.3	3.0	3.3	2.3
Burglary	6.5	5.7	4.0	4.2	1.0	1.5	4.4	4.4
Weapons	.7	.7	1.6	1.2	2.3	.9	1.4	.9
Violent Property Destruction	.7	.9	1.2	1.2	2.6	1.2	1.3	1.0
Forgery, Fraud	.8	1.3	1.3	2.9	3.0	2.7	1.4	1.9
Robbery	1.0	.8	1.9	2.1	.6	1.5	1.1	1.2
Gambling	.1	----	.1	.1	.3	----	.1	----
Narcotics, Drugs	1.2	1.7	4.0	5.3	5.3	7.0	3.0	3.3
Homicide	----	.1	.1	.1	.2	.6	.1	.1
TOTAL	100.2	99.8	99.8	100.1	99.5	99.8	99.8	99.3
Percent Part I	24.9	25.4	15.5	17.8	12.3	12.7	19.3	21.3
Part I Mean Contacts per Person	.580	.319	.161	.100	.159	.032	.900	.451
Mean Contacts Per Person	2.3	1.3	1.0	.6	1.3	.3	4.7	2.2
Number of Police Contacts	3170	1635	1412	732	1765	329	6347	2696

TABLE 3. DISTRIBUTION OF POLICE CONTACTS BY TYPE IN COHORTS AND AGE PERIODS WITH 1955 COHORT AS OF 1988 ADDED

	Ages 6-17				Ages 18-20				Ages 21+				Total			
	1942	1949	1955		1942	1949	1955		1942	1949	1955		1942	1949	1955	
			1976	1988			1976	1988			1976	1988			1976	1988
Traffic	25.4	17.2	10.1	9.4	52.2	39.0	31.3	31.6	49.4	36.7	28.9	42.0	42.5	28.4	17.8	23.4
Disorderly Conduct	25.3	22.3	15.0	14.5	15.7	21.7	27.4	27.5	20.9	28.1	35.5	21.3	21.2	23.8	20.3	19.3
Suspicion, Investigation	16.6	19.9	15.1	15.1	16.9	25.1	12.2	12.5	21.0	22.4	15.1	7.3	18.9	21.9	14.2	12.4
Liquor	6.1	5.1	2.3	2.5	4.0	1.9	2.1	2.1	2.0	1.6	1.0	1.6	3.6	3.3	2.2	2.2
Theft	7.8	9.6	12.9	12.7	3.0	3.0	5.4	5.6	1.1	1.9	3.1	5.0	3.6	5.7	9.9	9.0
Incorrigible, Runaway, Truant	9.6	14.0	26.5	27.9	1.0	.2	.3	.3	.1	.2	----	----	3.2	6.5	16.9	14.0
Vagrancy	2.6	2.7	1.7	1.6	1.6	2.1	.7	.6	.5	.7	1.3	.4	1.4	2.0	1.4	1.0
Auto Theft	2.9	1.9	2.4	2.2	1.2	.7	1.5	1.3	.2	.1	.2	.2	1.2	1.1	2.0	1.4
Sex Offenses	.6	1.2	.9	.8	2.0	1.5	1.3	1.5	.9	1.2	1.0	1.1	1.0	1.3	1.0	1.0
Assault	.5	1.0	2.3	2.5	.2	1.0	2.4	2.6	1.2	1.8	2.1	5.3	.8	1.2	2.3	3.3
Burglary	1.6	2.8	6.2	6.5	.6	.6	3.8	4.0	.2	.4	.8	1.0	.7	1.6	5.1	4.4
Weapons	.5	.4	.7	.7	.2	.4	1.4	1.6	.5	.4	1.2	2.3	.4	.4	.9	1.4
Violent Property Destruction	.6	.2	.7	.7	1.0	.7	1.3	1.2	.1	.4	1.0	2.6	.4	.4	.9	1.3
Forgery, Fraud	----	1.0	.8	.8	.2	1.2	1.9	1.3	.7	1.4	1.8	3.0	.4	1.1	1.2	1.4
Robbery	----	.4	.8	1.0	.2	.3	2.0	1.9	.5	.3	.7	.6	.3	.4	1.1	1.1
Gambling	.1	.2	.1	.1	----	.1	.2	.1	.3	.1	----	.3	.2	.1	.1	.1
Narcotics, Drugs	----	----	1.5	1.2	----	.6	4.7	4.0	.3	2.2	5.9	5.3	.1	.8	2.8	3.0
Homicide	----	----	-.1	----	----	.1	.1	.1	----	----	.3	.2	----	-.1	.1	.1
TOTAL	100.2	99.9	100.1	100.2	100.0	100.2	100.0	99.8	99.9	99.9	99.9	99.5	99.9	100.1	100.2	99.8
Percent Part I	12.7	15.9	24.6	24.9	5.2	5.6	15.3	15.5	3.2	4.5	7.2	12.3	6.5	10.0	20.5	19.3
Part I Mean Contacts per Person	.168	.307	.510	.580	.041	.060	.143	.161	.070	.055	.021	.159	.278	.422	.673	.900
Mean Contacts Per Person	1.3	1.9	2.1	2.3	.8	1.1	.9	1.0	2.2	1.2	.3	1.3	4.3	4.2	3.3	4.7
Number of Police Contacts	836	2511	4444	3170	498	1383	2008	1412	1370	1587	608	1765	2704	5481	7060	6347

contacts for traffic offenses, theft, assault, weapons, violent property destruction, and forgery and fraud during the age period 21+. All of this combines to increase the percent of the 1955 Cohort's police contacts which are classified as Part I offenses. The differences in the distribution of cohort members based on continuous residence status are relatively small as summarized by the percent with Part I offenses, but larger for the mean rate of Part I offenses or the mean number of contacts per person. On the other hand, these differences between continuous residents in 1976 and 1988 from the 1955 Cohort are relatively small and indicate that the continuous residents continue to be representative of the cohort.

That the loss of 803 cohort members as continuous residents did not change the nature of findings which will be made with the reduced cohort is better indicated by the general pattern of offenses for those who remained when compared with the 1976 pattern. Table 3 reveals that the 1976 and 1988 continuous residence cohorts are very similar for comparable periods. For example, if controls for sex are inserted and the number of police contacts for continuous residence during the juvenile period are compared with those for non-continuous residents, the differences in the distributions are not significant at the .05 level. If race/ethnicity is inserted as a control, continuous vs. non-continuous residents are not significantly different. If both sex and race/ethnicity are controlled, the only significant difference is found for Black males with those who remained in Racine having significantly more police contacts than those who moved away.

When comparisons for offense seriousness are made with controls for sex, both males and females who remained in Racine had more serious offense records than did those who left. When controls for race/ethnicity were utilized, the only significant difference was for Blacks, those who remained in Racine having significantly more serious reasons for police contacts than did those who left. When both controls were utilized, White and Black females who remained had more serious records than did those who left.

Turning to the 18 through 20 age period, males who remained in Racine had more police contacts than did those who left, Whites who remained had more police contacts than did those who left, and both White and Black females who remained had significantly more police contacts than did those who left.

Offense seriousness comparisons for the 18 through 20 age period followed a similar pattern to others, males with continuous residence having significantly more serious offense patterns, Whites and Blacks with continuous residence having significantly more serious offense patterns, and White males

and females who remained having significantly more serious offense patterns (Black males and females who remained had more serious offense patterns but the differences were not significant).

The dissimilarities shown for age 21+ are based on changes in the distribution of offense patterns which come with age, an increase in traffic offenses, and a decrease in disorderly conduct, for example. This table also reveals that the percent of police contacts which were Part I remains the same for the two comparable age periods, 24.6 vs. 24.7 and 15.3 vs. 15.5, and that the number of Part I contacts per person remains about the same, .510 vs. .575 and .143 vs. .159.

The longer period of time at risk for the 1955 Cohort now enables us to see that that cohort had a higher Part I mean contacts per person and more mean contacts in general than did the 1942 and 1949 Cohorts. In other words, the increasing seriousness or at least recorded seriousness of the 1955 Cohort was clear.

The Changing Incidence of Serious Offenses by Cohort and Within the 1955 Cohort

More specific comparisons of the 1976 and 1988 continuous residence cohorts may be made with the data in Table 4. This table enables us to see how the incidence of police contacts for various offenses has increased or remained stable during each age period for the three cohorts for persons in the cohort and also for those with police contacts. The first rate enables us to see how the incidence of some more serious offenses has remained stable or changed for the entire cohort and the second rate allows us to see the same for those who have had police contacts. In the latter case we are able to ascertain where the increases have been greatest among those who did get into trouble. This also permits us to determine how the 1988 continuous residents in the cohort differ in their incidence of specific kinds of seriousness during some age periods more than during others. We are, of course, particularly interested in what happened during the age 21+ period.

Since there are few notable differences in the incidence rates between the 1976- and 1988-defined continuous residence groups during the 6-17 and 18-20 age periods, we again see the extended 1988 group as representative of the 1955 Cohort. The high incidence offenses which have increased cohort by cohort have been blocked on Table 4 in order to focus attention on some of the findings that point to the value of bringing the 1955 Cohort up to date. It

TABLE 4. POLICE CONTACT TYPE: MEAN RATES BASED ON NUMBER OF CONTACTS DIVIDED BY NUMBER OF PERSONS IN COHORT AND NUMBER OF PERSONS IN COHORT WITH CONTACTS

	Ages 6-17								Ages 18-20							
	COHORT				PERSONS WITH CONTACTS				COHORT				PERSONS WITH CONTACTS			
	1955				1955				1955				1955			
	1942	1949	1976	1988	1942	1949	1976	1988	1942	1949	1976	1988	1942	1949	1976	1988
Traffic	.335	.334	.209	.220	.838	.694	.476	.478	.411	.416	.292	.329	1.300	1.041	.844	.858
Disorderly Conduct	.334	.430	.310	.340	.834	.894	.703	.739	.124	.231	.256	.286	.390	.579	.741	.746
Suspicion, Investigation	.220	.386	.312	.353	.549	.801	.708	.769	.133	.268	.114	.130	.420	.670	.328	.340
Liquor	.081	.098	.048	.058	.202	.204	.110	.127	.032	.020	.020	.021	.100	.050	.058	.056
Theft	.103	.187	.267	.296	.257	.388	.607	.644	.024	.032	.050	.058	.075	.081	.145	.152
Incorrigible, Runaway, Truant	.126	.271	.549	.651	.316	.563	1.246	1.417	.008	.002	.002	.003	.025	.006	.007	.008
Vagrancy	.035	.053	.053	.036	.087	.111	.080	.079	.013	.022	.006	.007	.040	.056	.018	.017
Auto Theft	.038	.037	.050	.052	.095	.077	.113	.112	.010	.007	.014	.013	.030	.017	.040	.035
Sex Offenses	.008	.022	.018	.018	.020	.047	.040	.040	.016	.016	.013	.015	.050	.041	.036	.040
Assault	.006	.020	.047	.057	.016	.042	.107	.125	.002	.011	.023	.027	.005	.027	.066	.069
Burglary	.021	.055	.128	.151	.051	.114	.292	.329	.005	.006	.036	.042	.015	.015	.104	.110
Weapons	.006	.009	.014	.016	.016	.018	.032	.035	.002	.005	.014	.017	.005	.012	.039	.044
Violent Property Destruction	.008	.005	.015	.015	.020	.010	.034	.034	.008	.007	.012	.013	.025	.017	.004	.033
Forgery, Fraud	----	.019	.017	.011	----	.040	.039	.024	.002	.012	.012	.013	.005	.031	.051	.035
Robbery	----	.009	.017	.024	----	.018	.038	.051	.002	.003	.019	.020	.005	.008	.055	.052
Gambling	.002	.003	.001	.001	.004	.006	.002	.003	----	.001	.001	.001	----	.002	.004	.004
Narcotics, Drugs	----	----	.031	.029	----	----	.070	.063	----	.006	.044	.041	----	.015	.128	.108
Homicide	----	----	.001	----	----	----	.001	----	----	.001	.001	.001	----	.002	.003	.002
TOTAL MEAN RATE	1.321	1.936	2.068	2.336	3.304	4.024	4.698	5.080	.787	1.066	.934	1.041	2.490	2.670	2.699	2.715
Annualized	.220	.323	.345	.390	.551	.671	.783	.848	.262	.253	.311	.348	.830	.890	.900	.902
Part I Mean Rate	.168	.307	.510	.580	.419	.638	1.158	1.261	.041	.060	.143	.161	.130	.151	.413	.416
Annualized	.028	.051	.085	.096	.070	.106	.193	.210	.014	.020	.048	.054	.043	.050	.138	.139
Number of Contacts	836	2511	4444	3170	836	2511	4444	3170	498	1383	2008	1412	498	1383	2008	1412
Number of Persons in Cohort	633	1297	2149	1357	253	624	946	624	633	1297	2149	1357	200	518	744	520

	Ages 21+								Total							
	COHORT				PERSONS WITH CONTACTS				COHORT				PERSONS WITH CONTACTS			
	1955				1955				1955				1955			
	1942	1949	1976	1988	1942	1949	1976	1988	1942	1949	1976	1988	1942	1949	1976	1988
Traffic	1.070	.450	.082	.547	2.027	1.152	.507	1.318	1.815	1.199	.584	1.095	2.630	1.734	.987	1.559
Disorderly Conduct	.452	.344	.101	.277	.856	.882	.622	.668	.909	1.006	.667	.903	1.315	1.454	1.128	1.310
Suspicion, Investigation	.445	.275	.043	.095	.862	.704	.265	.229	.807	.928	.468	.579	1.169	1.341	.792	.825
Liquor	.043	.020	.003	.021	.081	.051	.017	.052	.155	.138	.072	.101	.224	.200	.121	.144
Theft	.024	.023	.009	.065	.045	.059	.055	.156	.152	.242	.326	.419	.220	.350	.552	.608
Incorrigible, Runaway, Truant	.002	.002	----	----	.003	.006	----	----	.136	.275	.551	.654	.197	.398	.932	.932
Vagrancy	.011	.009	.004	.005	.021	.022	.023	.012	.059	.084	.045	.048	.085	.122	.076	.068
Auto Theft	.005	.001	.001	.002	.009	.002	.003	.005	.052	.045	.064	.067	.076	.065	.109	.095
Sex Offenses	.021	.015	.003	.014	.039	.038	.017	.034	.044	.053	.033	.048	.064	.077	.056	.068
Assault	.025	.022	.006	.069	.048	.055	.038	.165	.033	.052	.076	.153	.048	.076	.128	.222
Burglary	.005	.005	.002	.013	.009	.014	.014	.032	.030	.066	.167	.206	.044	.096	.282	.294
Weapons	.011	.005	.003	.030	.021	.014	.020	.073	.019	.019	.031	.063	.028	.027	.052	.090
Violent Property Destruction	.003	.005	.003	.033	.006	.014	.017	.080	.019	.017	.029	.061	.028	.025	.050	.087
Forgery, Fraud	.016	.017	.005	.039	.030	.044	.032	.094	.017	.049	.040	.071	.025	.070	.068	.103
Robbery	.011	.004	.002	.007	.021	.010	.012	.018	.011	.015	.038	.051	.016	.022	.064	.074
Gambling	.006	.001	----	.004	.012	.002	----	.009	.008	.005	.002	.007	.011	.007	.004	.009
Narcotics, Drugs	.006	.027	.017	.069	.012	.069	.014	.165	.006	.033	.092	.139	.009	.048	.155	.197
Homicide	----	----	.001	.002	----	----	.006	.005	----	.001	.002	.003	----	.001	.004	.004
TOTAL MEAN RATE	2.164	1.224	.283	1.302	4.102	3.136	1.752	3.135	4.272	4.226	3.285	4.677	6.188	6.110	5.560	6.788
Annualized	.180	.245	.283	.100	.342	.627	1.752	.241	.203	.302	.323	.213	.295	.436	.556	.323
Part I Mean Rate	.070	.055	.021	.158	.132	.140	.127	.382	.278	.422	.673	1.099	.403	.610	1.139	1.291
Annualized	.006	.011	.021	.012	.011	.028	.127	.030	.013	.030	.067	.050	.019	.044	.114	.061
Number of Contacts	1370	1587	608	1765	1370	1587	608	1765	2704	5481	7060	6347	2704	5481	7060	6347
Number of Persons in Cohort	633	1297	2149	1357	334	506	347	563	633	1297	2149	1357	434	897	1270	935

is undoubtedly the increasing incidence of these offenses which is responsible for public concern and public responses.

In addition to the Total Mean Rates and Part I Mean Rates for cohorts and age periods, annualized mean rates for both are included to permit more straightforward comparisons between cohorts and time periods. Note that both annualized rates increase cohort by cohort for the first two age periods. During the age period 21+ the picture is more complex. The cohort to cohort increase was present in comparisons made with the unextended 1955 Cohort but the extended 1955 Cohort with its 13 years of exposure after age 21 had entered the period of declining criminal activity and thus produced a lower annualized rate. Had the mean rates for the 1955 Cohort as extended to 1988 been divided by 5 or 6 rather than 13, the annualized rate might have been more representative of the period.

The annualized rates also showed that in most cases mean rates were highest during the age period 18-20 but always lowest at age 21+. On the other hand, mean Part I offense rates were always highest during the 6-17 age period, declining thereafter. However these rates are examined, the 1955 Cohort had accumulated higher rates for serious offenses than had the 1942 and 1949 Cohorts.

The Changing Distribution of Serious Offenses by Age Period, Sex, and Cohort

Since we have made only limited male-female comparisons to this point, two tables describing age period and cohort sex differences are now included. The first, Table 5, shows how at every age period in every cohort except one males have a higher percentage of their police contacts in the three most serious offense categories and that these differences remain at every age period in the extended 1955 Cohort. The proportion of female police contacts in serious offense categories has also increased cohort by cohort. It is also clear that male-female differences in offense seriousness have decreased from cohort to cohort. This conclusion has repeatedly appeared in the literature for many years but it is important to note that the same finding appears in the Racine cohorts.

Another approach to comparison of the changing distribution of sex differences is presented in Table 6. Here we see that when all members of each cohort are arrayed according to their most serious offense, the extended 1955 Cohort is more skewed toward the serious end of the continuum than was the original cohort whose records had been followed to only 1976 or than were either males or females from the 1942 and 1949 Cohorts. It is also apparent

TABLE 5. PERCENT OF CONTACTS IN SERIOUSNESS OF CONTACT CATEGORY BY COHORT, SEX, AND AGE PERIOD*

	Ages 6-17						Ages 18-20					
	Males			Females			Males			Females		
	1942	1949	1955	1942	1949	1955	1942	1949	1955	1942	1949	1955
Felony Against Person	.5	.8	2.7	----	.9	3.2	.9	1.1	8.5	3.5	----	5.3
Felony Against Property	5.3	6.2	11.8	1.0	.3	2.9	2.0	2.8	8.9	----	1.1	2.8
Major Misdemeanor	9.1	11.6	16.5	5.2	9.0	13.7	5.0	6.0	11.2	----	1.5	6.9
Minor Misdemeanor	47.6	41.1	27.3	33.3	28.8	28.7	46.0	40.3	57.5	35.1	42.6	74.9
Juvenile Condition	9.2	13.0	26.3	12.5	20.7	36.8	1.1	.3	.1	----	.4	.6
Suspicion, Investigation	28.4	27.4	15.4	47.9	40.2	14.7	44.9	49.5	13.8	61.4	54.4	9.4
TOTAL	100.0	100.1	100.0	99.9	100.0	100.0	99.9	100.0	100.0	100.0	100.0	99.9
Mean Seriousness	2.6	2.6	2.9	2.0	2.1	2.6	2.2	2.2	3.2	1.9	1.9	3.1
Number of Contacts	740	2188	2499	96	323	627	441	1113	1067	57	270	319
	Ages 21+						Total					
	Males			Females			Males			Females		
	1942	1949	1955	1942	1949	1955	1942	1949	1955	1942	1949	1955
Felony Against Person	1.1	2.1	6.3	1.1	2.5	8.7	.9	1.2	4.9	1.2	1.1	5.3
Felony Against Property	1.1	2.0	2.3	----	.7	1.5	2.6	4.2	8.6	.3	.7	2.4
Major Misdemeanor	3.3	5.5	17.3	1.7	3.9	18.0	5.4	8.5	15.6	2.4	5.0	13.4
Minor Misdemeanor	45.4	47.8	66.5	41.8	50.9	65.3	46.2	42.8	44.4	38.2	40.2	50.6
Juvenile Condition	----	.1	----	.6	.7	----	3.1	6.3	13.5	3.9	8.0	17.3
Suspicion, Investigation	49.1	42.5	7.6	54.8	41.4	6.5	41.9	37.0	13.0	53.9	45.0	11.0
TOTAL	100.0	100.0	100.0	100.0	100.1	100.0	100.0	100.0	100.0	99.9	100.0	100.0
Mean Seriousness	2.4	2.3	3.3	1.9	2.3	3.3	2.3	2.4	3.1	1.9	2.1	3.0
Number of Contacts	1193	1302	1333	177	285	401	2374	4603	4899	330	878	1347

* 1955 Cohort reported for persons with continuous residence in 1988.

TABLE 6. PERCENTAGE OF RACINE BIRTH COHORTS WHOSE MOST SERIOUS POLICE CONTACT WAS AT SPECIFIED LEVEL

Cause of Contact	1942 Cohort			1949 Cohort			1955 Cohort (1976)			1955 Cohort (1988)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Felony Against Person	5.1	1.8	3.6	5.7	2.9	4.5	12.7	4.6	8.8	14.9	7.0	11.2
Felony Against Property	8.1	.4	4.7	9.5	.9	5.8	9.0	2.1	5.7	9.8	2.7	6.4
Major Misdemeanor	12.6	2.2	8.1	13.2	5.9	10.1	10.6	6.5	8.6	13.5	10.6	12.2
Minor Misdemeanor	40.4	19.1	31.1	37.0	19.6	29.5	24.8	16.0	20.6	35.7	32.1	34.0
Juvenile Condition	1.1	1.8	1.4	1.6	2.0	1.8	3.8	4.2	4.0	2.1	3.4	2.7
Suspicion, Investigation	16.9	22.7	19.4	14.6	21.0	17.3	10.9	12.0	11.4	2.9	3.3	3.1
Total Contacts of Any Type	84.2	48.0	68.3*	81.6	52.3	69.0	71.8	45.4	59.1	78.9	59.1	69.6
Number of Persons	356	277	633	740	557	1297	1114	1035	2149	717	640	1357

* The percent who had ever had a contact was slightly smaller than in other tables because of loss in rounding.

that sex differences have declined even more as the 1955 Cohort's period of exposure was increased.

Conclusion

Every comparison in this chapter has indicated that those members of the 1955 Cohort who left Racine, whether it be to outlying suburban neighborhoods, to other cities in Wisconsin, to other states, particularly the East and West Coasts, or to foreign countries, were somewhat more middle or upper SES than those who remained in Racine. Every comparison has also shown that during the age periods 6-17 and 18-20, those who left had relatively fewer and less serious police contacts than did those who stayed.

While these differences were relatively small when comparisons were made using all neighborhoods and all offense categories for police contacts, when neighborhoods and offenses were grouped, the differences became apparent, even though not always consistent. We concluded that the 1955 Cohort members had been more involved with the justice system than had other cohorts and that those who remained had been somewhat more involved than had those who left. The extended sample provides us with 1,357, 1955 Cohort members distributed among groups of neighborhoods in a sufficiently balanced way that it will be possible to conduct the types of analyses which will enable us to examine the nexus between alcohol/drugs and delinquency/crime with controls for sex and neighborhood of socialization. An even larger augmented sample with more relaxed rules for continuous residence will be considered in a later chapter.

Chapter 5

THE SPATIAL DISTRIBUTION AND DRUG/DELINQUENCY/CRIME OF THE 1955 COHORT BY NEIGHBORHOOD OF SOCIALIZATION

Introduction

Although we have described the distribution of delinquency and crime (events) in Racine as related to the changing social structure of the community, represented by various types of Police Grid Areas and Aldermanic Districts, we have only touched on the distribution of delinquents and criminals (people) represented by their numbers and proportions in various types of neighborhoods. Table 4 in Chapter 2, for example, showed that 55.2% of the juvenile and 68.9% of the adult all-around street offenders were concentrated in seven inner city and three transitional neighborhoods during their period of socialization, that officially recorded drug offenders in the 1955 Cohort have some concentration therein, but were also socialized in more of the stable and peripheral neighborhoods than were all-around street offenders, and that self-reported drug offenders/users (even those who reported drug use in the category of frequently or all of the time) were socialized in neighborhoods scattered throughout the city and were distributed pretty much as were the members of the 1942 and 1949 Cohorts. This raises the question of how 1988-defined continuous residents are distributed by neighborhood of socialization or origin in comparison with the 1976-defined continuous residents from the 1955 Cohort.

Neighborhoods Generating Disproportionate Numbers of All-Around Street Offenders and Drug Offenders

Table 1 shows the distribution of the 1988-defined continuous residents from the 1955 Cohort by neighborhood of socialization in comparison with the 1976 distribution. Note that there are proportionately more persons who were socialized in the inner city among those who remained in 1988, 26.2% vs. 24% from the cohort in 1976. The proportion in transitional and stable neighborhoods was essentially the same but there were fewer left who had been socialized in the peripheral areas. The proportion remaining in each neighborhood within each cluster showed considerable proportional variation but these small percentage fluctuations tended to cancel each other out. Again, the data indicate that those who remained in Racine were fairly representative of those who were still there in 1976. The differences that are found will not place obstacles in our path in terms of the detailed analyses of the alcohol/drug delinquency/crime nexus.

TABLE 1. NEIGHBORHOOD OF JUVENILE RESIDENCE OF RECORDED DRUG OFFENDERS AND ALL-AROUND STREET OFFENDERS (1955 COHORT) WITH CONTINUOUS RESIDENCE AS DEFINED IN 1976 AND 1988

NGH	% 1955 Cohort in NGH		% All-Around Street Offenders in Neighborhood				% Drug Offenders in Neighborhood			
	1976	1988	Juv 1976	1988	Adult 1976	1988	Juv 1976	1988	Adult 1976	1988
I n n e r C i t y										
11	1.4	1.5	8.4	16.0	12.5	7.7	3.8	3.5	4.5	3.9
7	2.4	3.0	3.6	4.0	15.6	23.1	---	---	7.5	9.1
13	2.8	3.1	9.6	8.0	3.1	7.7	1.9	3.5	6.0	7.8
12	2.3	1.9	8.4	12.0	3.1	7.7	1.9	3.5	7.5	5.2
9	2.5	2.9	4.8	16.0	6.3	15.4	1.9	---	6.0	5.2
17	1.8	2.3	4.8	---	6.3	---	---	---	1.5	1.3
8	2.4	2.5	6.0	12.0	3.1	---	---	---	---	5.2
10	1.5	1.7	2.4	4.0	3.1	7.7	---	---	1.5	2.6
3	.4	.4	1.2	---	3.1	---	1.9	---	1.5	1.3
2	3.2	3.5	3.6	8.0	---	---	---	---	6.0	6.5
5	2.0	2.0	1.2	---	---	---	3.8	6.9	4.5	2.6
1	.1	.2	---	---	---	---	1.9	3.5	---	2.6
6	1.0	1.0	---	---	---	---	---	---	1.5	---
61	.2	.2	---	---	---	---	---	---	---	1.3
SUB	24.0	26.3	54.0	80.0	56.4	69.3	17.1	20.9	45.0	54.6
T r a n s i t i o n a l										
18	1.3	1.2	3.6	---	6.3	7.7	1.9	---	3.0	1.3
54	2.1	2.5	3.6	---	6.3	7.7	3.8	3.5	---	2.6
37	1.6	1.4	2.4	4.0	6.3	---	3.8	3.5	3.0	2.6
16	1.9	2.2	2.4	4.0	3.1	---	---	---	4.5	1.3
49	2.0	2.2	4.8	4.0	---	---	3.8	3.5	1.5	1.3
46	2.6	3.0	3.6	---	---	---	5.8	6.9	1.5	1.3
19	1.7	1.6	2.4	---	---	---	1.9	3.5	1.5	---
50	2.2	1.9	2.4	---	---	---	1.9	3.5	---	---
4	1.5	1.0	1.2	---	---	---	---	---	1.5	1.3
33	2.3	2.6	---	---	---	---	1.9	3.5	1.5	2.6
65	.2	.3	---	---	---	---	1.9	---	---	---
62	.3	.4	---	---	---	---	---	---	---	---
60	.2	.2	---	---	---	---	---	---	---	---
SUB	19.9	20.5	26.4	12.0	20.0	15.4	26.7	27.9	18.0	14.3
S t a b l e										
31	3.0	2.8	2.4	---	3.1	7.7	1.9	---	1.5	1.3
35	1.7	1.9	1.2	---	3.1	---	1.9	---	1.5	1.3
56	2.1	2.2	---	---	3.1	---	7.7	6.9	---	---
36	2.6	2.9	---	---	3.1	---	---	---	---	---
29	2.1	2.2	---	---	3.1	---	---	---	---	---
59	.3	.4	---	---	3.1	---	---	---	---	---
23	2.2	2.1	2.4	---	---	---	1.9	---	1.5	2.6
15	1.6	1.9	2.4	4.0	---	---	---	---	3.0	1.3
53	2.2	2.1	1.2	---	---	---	3.8	6.9	---	1.3
30	1.3	1.1	1.2	---	---	---	1.9	3.5	1.5	---
14	2.1	2.2	1.2	---	---	---	1.9	---	---	---
34	2.1	2.0	1.2	---	---	---	---	---	1.5	1.3
48	.2	.3	1.2	---	---	---	---	---	---	---
32	3.1	3.0	---	---	---	---	1.9	---	3.0	2.6
67	.5	.6	---	---	---	---	1.9	3.5	---	---
63	.2	.3	---	---	---	---	1.9	---	---	---
64	.1	.1	---	---	---	---	1.9	3.5	---	---
21	1.5	1.5	---	---	---	---	---	---	1.5	1.3
22	1.3	1.2	---	---	---	---	---	---	---	---
20	1.0	.7	---	---	---	---	---	---	---	---
58	.6	.4	---	---	---	---	---	---	---	---
68	.4	.2	---	---	---	---	---	---	---	---
66	---	---	---	---	---	---	---	---	---	---
SUB	32.2	31.1	14.4	4.0	18.6	7.7	28.6	24.3	15.0	13.0
P e r i p h e r a l										
25	2.5	2.2	---	---	3.1	---	3.8	3.5	---	---
47	2.1	2.2	1.2	---	---	7.7	1.9	3.5	7.5	7.8
41	1.3	1.1	1.2	---	---	---	5.8	6.9	---	2.6
28	2.6	2.7	1.2	---	---	---	1.9	3.5	---	1.3
51	1.2	1.3	1.2	4.0	---	---	---	---	1.5	1.3
38	2.7	2.5	---	---	---	---	5.8	3.5	1.5	2.6
42	1.7	1.5	---	---	---	---	3.8	6.9	3.0	---
55	1.6	1.2	---	---	---	---	1.9	---	1.5	---
27	1.3	1.0	---	---	---	---	---	---	3.0	---
57	1.3	1.1	---	---	---	---	1.9	---	---	---
39	2.0	1.8	---	---	---	---	---	---	1.5	1.3
24	.3	.4	---	---	---	---	---	---	1.5	1.3
26	1.0	.4	---	---	---	---	---	---	---	---
52	1.6	1.7	---	---	---	---	---	---	---	---
70	.5	.6	---	---	---	---	---	---	---	---
SUB	23.7	21.7	4.8	4.0	3.1	7.7	26.8	27.8	21.0	18.2
T	99.8	99.5	99.6	100.0	100.1	100.1	99.2	100.9	99.0	100.1

Going a step further, those all-around street offenders who were continuous residents in both 1976 and 1988 are from in the various neighborhoods of socialization in quite different proportions for both the juvenile and adult periods. They (1988 continuous residents) not only had different distributions in the various neighborhoods as juveniles than did the total 1955 Cohort, but a far larger proportion was from the inner city (80% and 69.3%) than that for the total 1955 Cohort (54% and 56.4%). In sum, eight inner city neighborhoods had socialized 80% of those who had police records as all-around street offenders as juveniles. Three transitional neighborhoods had socialized another 12%. There was even greater concentration for place of socialization for those who were street offenders during the adult period, six inner city neighborhoods with 69.3% and two transitional neighborhoods with 15.4%, for a total of 84.7% in eight of the 65 neighborhoods. This point will be developed more fully as neighborhood maps (which portray the spatial distribution of those who are street offenders and those who have had police contacts for drug offenses) are presented.

The question for consideration at this juncture is why those cohort members who remained in Racine and who had all-around street offender careers were from fewer neighborhoods than were those from the 1955 Cohort as of 1976. Aside from the fact that there were fewer street offenders among those remaining in 1988, it would be consistent with prior comparisons to say that those who were street offenders from outside the inner city neighborhoods were more likely to have been the less serious street offender types. They were more likely to have left Racine than were more serious types socialized in the inner city. Be all that as it may, the distribution of the 1955 Cohort members in 1976 and 1988 is sufficiently similar that the skewness of the all-around street offenders toward the inner city neighborhoods of socialization assures us that the inner city's serious offenders have been far less mobile than their counterparts from other neighborhoods.

The picture for drug offenders was particularly interesting in that the concentration of those who had inner city origins and who had police contacts for drug offenses as juveniles was less than half of that of those who had drug contacts as adults. Both juvenile and adult drug offenders who had continuous residence in 1988 were more likely to be from the inner city than were those with continuous residence in 1976. The concentration of drug offenders was disproportional to the distribution of cohort members only for the adult period, however. Those who remained in Racine who had not had police contacts for drug offenses prior to 1976 could have acquired them in

the 12 years between 1976 and 1988. The 10% increase in inner city origins for those who had police contacts for drugs as adults suggests that there was a disproportional increase in detectable drug offenses between 1976 and 1988 for those who were socialized in the inner city and in all probability continued to reside there. This is another aspect of the "hardening of the inner city."

The concentration of drug offenders by place of origin was most disproportional to the distribution of the 1955 Cohort in the transitional and peripheral neighborhoods during the juvenile period, while the adult concentration was most disproportional in the inner city. What is clearest, however, is that drug offenders during the juvenile period were spatially distributed throughout the 65 neighborhoods more proportionately to the 1955 Cohort distribution than were all-around street offenders but that by the adult period the drug offenders had moved closer in their spatial distribution to that of the street offenders.

At this point we believe that comparison of the spatial distribution of all-around street offenders and drug offenders by neighborhood of socialization with the distribution of the cohort as of 1976 and 1988 suggests even more strongly that social structure variables influence the development of different types of offender careers.

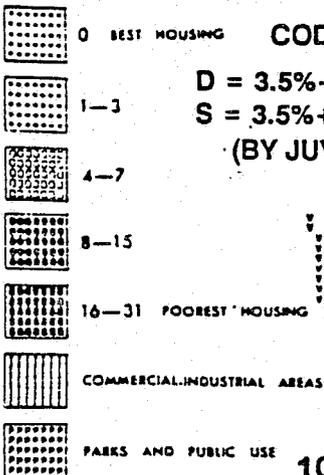
Maps 1 and 2 offer a visual presentation of which neighborhoods of socialization produced most of the juvenile and/or adult drug offenders and juvenile and/or adult all-around street offenders in the 1955 Cohort, i.e., neighborhoods with 3.5% or more of the juvenile and/or 3.5% or more of the adult drug and/or all-around street offenders. Map 1 is for neighborhoods superimposed on Police Grid Areas and represents the drug/street offender concentration for the cohort as of 1976. Map 2 is for neighborhoods superimposed on Aldermanic Districts. It shows how the pattern of concentration by place of origin has changed between 1976 and 1988 among those street offenders who remained and among those cohort members who had contacts for drug offenses as of 1976 and 1988.

A capital "D" (19 neighborhoods) and/or "S" (13 neighborhoods) in the neighborhood in Map 1 means that of the 1955 Racine Cohort continuous residents (defined as of 1976), 3.5% or more of the juveniles and/or adults, drug and/or street offenders, resided in that neighborhood most of the time as juveniles. Eleven of these neighborhoods fell within six inner city and transitional Police Grid Areas (8, 9, 12, 13, 16, and 17) and seven Aldermanic

MAP 1

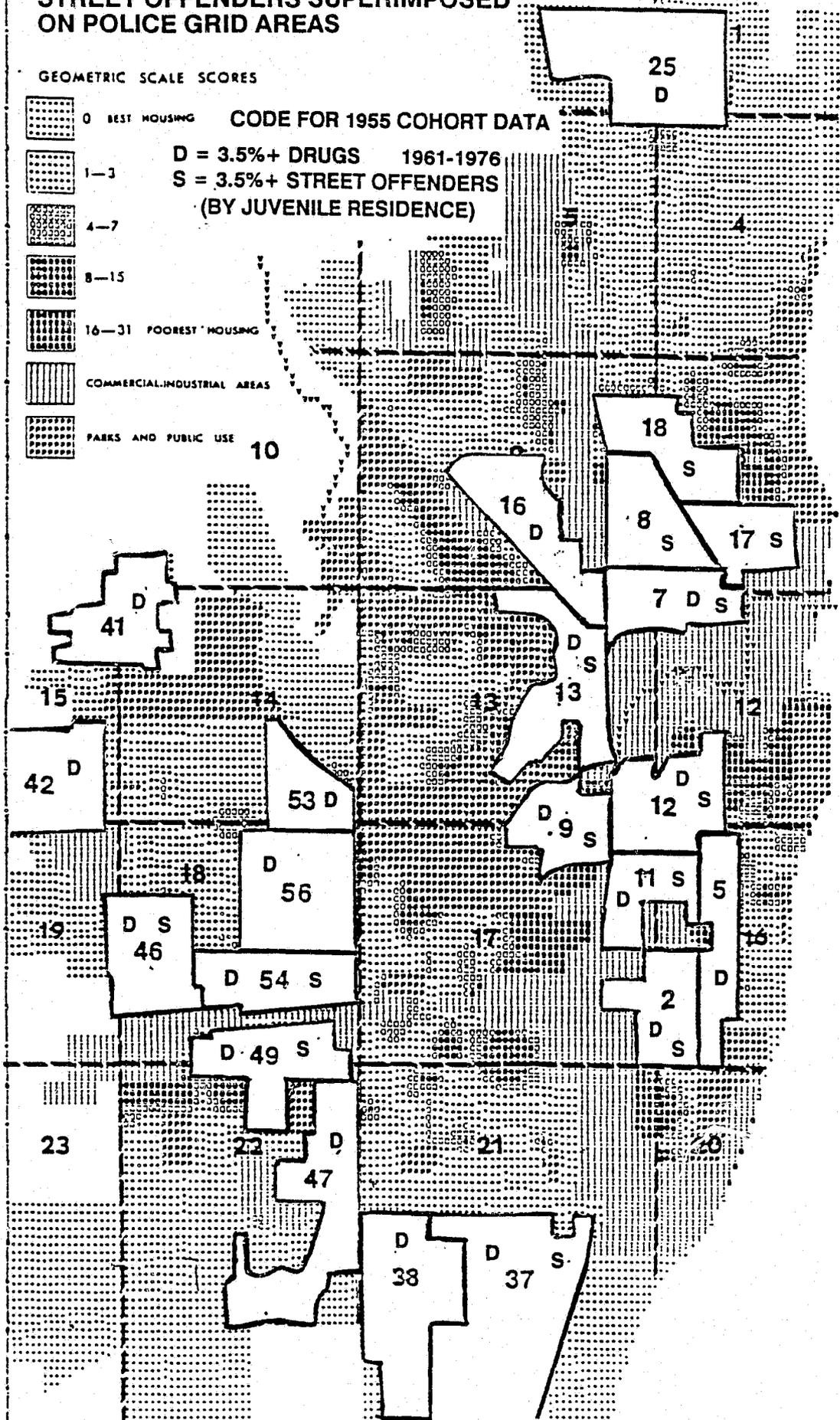
NEIGHBORHOODS WITH 3.5%+
OF 1955 COHORT'S DRUG AND/OR
STREET OFFENDERS SUPERIMPOSED
ON POLICE GRID AREAS

GEOMETRIC SCALE SCORES



CODE FOR 1955 COHORT DATA

D = 3.5%+ DRUGS 1961-1976
S = 3.5%+ STREET OFFENDERS
(BY JUVENILE RESIDENCE)



Districts (1, 2, 3, 4, 5, 7, and 8); ten other neighborhoods were in other Police Grid Areas and Aldermanic Districts.

Trends in offenses known to the police were shown for these Police Grid Areas on Graphs 1 and 2 in Chapter 3, as were their corresponding Aldermanic Districts. All had high and generally increasing offense rates. As we have said, aside from considerable concentration during the adult period of those drug offenders who were socialized in the inner city and transitional areas, drug offenders were scattered throughout the city by place of socialization more widely than were persons with careers as all-around street offenders. Most (eight out of 10) of the other neighborhoods of socialization with 3.5% or more of the cohort's drug offenders were found in Police Grid Areas and Aldermanic Districts not known for delinquency and crime (Grids 14, 15, 18, 21, and 22 and Aldermanic Districts 6, 10, 11, 12, and 13).

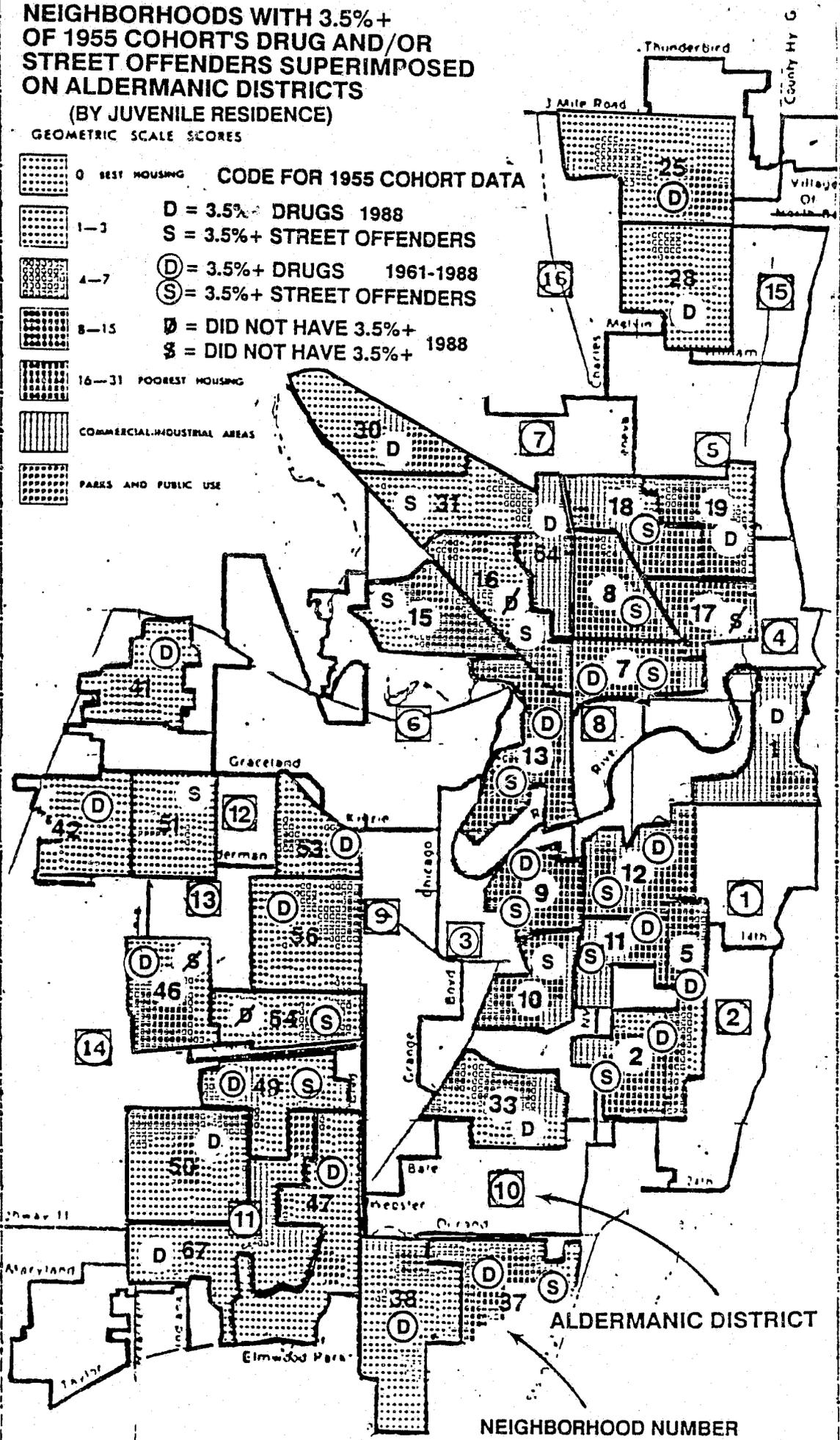
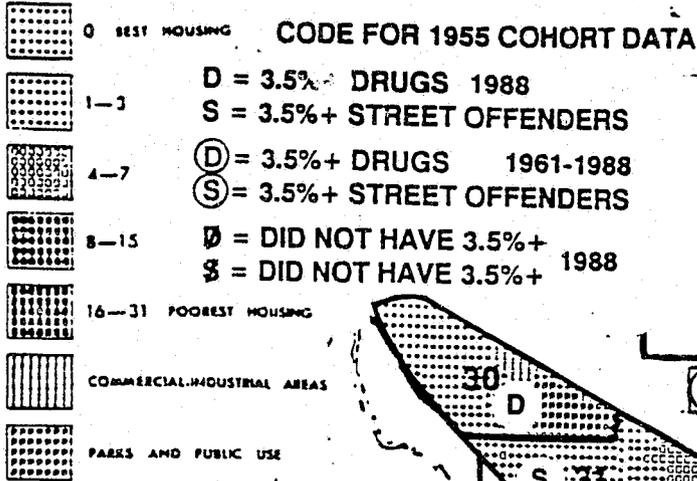
The numbers for Aldermanic Districts are circled and squared on Map 2 in order to clearly distinguish them from neighborhood numbers. Those neighborhoods of socialization which still have 3.5% of the drug offenders or all-around street offenders during the juvenile or adult period are shown with a circle around their neighborhood number. Neighborhoods of socialization that no longer have 3.5% of the 1955 Cohort's drug or all-around street offenders as juveniles or adults have a slash (/) through their "D" or "S."

Cohort members who remained continuous residents as of 1988 and whose neighborhoods of socialization now had 3.5% of those with police contacts for drug offenses are now found in 8 neighborhoods that did not have 3.5% of the drug offenders (Neighborhoods 1, 19, 28, 30, 33, 50, 64, and 67 are indicated by their number and a "D"). Five neighborhoods, 10, 15, 16, 31, and 51, that did not have 3.5% of the street offenders in 1976 but had them in 1988 and are shown by the neighborhood number and an "S." Thus, by 1988, drug offenders, were more broadly spread throughout the community by neighborhood of socialization.

What we have seen for the 1955 extended cohort is a concentration of street offenders in fewer neighborhoods but more neighborhoods with 3.5% of the total than previously and a decline in the number of neighborhoods of origin with any street offenders. The drug offenders are still spread throughout the city by place of origin. In addition, a number of neighborhoods of socialization are left with an increased proportion of the drug offenders who had continuous residence as of 1976, or who became drug offenders between 1976 and 1988 and therefore increased the proportion of drug offenders from the neighborhoods.

NEIGHBORHOODS WITH 3.5%+ OF 1955 COHORT'S DRUG AND/OR STREET OFFENDERS SUPERIMPOSED ON ALDERMANIC DISTRICTS (BY JUVENILE RESIDENCE)

GEOMETRIC SCALE SCORES



ALDERMANIC DISTRICT

NEIGHBORHOOD NUMBER

The Continuing Differential Impact of Drug Offenses and Neighborhood of Socialization on Criminal Career Continuity

Diagrams 3A, B, C, and D in Chapter 2 also revealed that members of the 1955 Cohort who had police contacts for drug offenses were not only distributed disproportionately to the distribution of cohort members by neighborhood of socialization, inner city vs. other, but that the proportion who were in serious offender types and the proportion who had continuity in their careers also varied by whether or not they had officially recorded drug offenses. These diagrams had led us to believe that whatever doubts we had about drugs as the cause of crime or crime as the cause of drugs or concomitant involvement as a product of life experiences, drugs seemed to have a catalytic effect on criminal career continuity that took us beyond structure and into processual explanations.

Table 2 takes the proportional distribution (collapsed) of the 1955 Cohort members with continuous residence in 1976 and compares their distribution with that of those who were continuous residents in 1988. This may seem to be a complex way of presenting it all, but it is really quite simple for those who have seriously followed the presentation as though it was a mystery (and it is really better than a fictional mystery--it is a real one). Note that the 1976- and 1988-defined continuous residents had similar proportional distributions in two of the four segments of the table. It is clear that those serious offenders who resided in the inner city neighborhoods as juveniles and had police contacts for drug offenses as juveniles desisted less as adults than did those who did not have drug contacts with the police or those who had contacts for drug offenses but resided in non-inner city neighborhoods as juveniles. Note the high proportion of serious offenders who desisted as adults among those who resided in non-inner city neighborhoods as juveniles. Also note that the second highest desistance rate from juvenile to adult was among the relatively small proportion who resided in the inner city and who had serious careers as juveniles but who did not have police contacts for drugs. In both of the segments of the tables for those who did not have drug contacts the 1976 and 1988 defined continuous residents had almost identical distributions.

Summary

We conclude that the 1988-defined continuous residents from the 1955 Cohort represent the consequences of living in various types of neighborhoods in essentially the same way as did the 1976-defined continuous residents. The differences shown in Table 2 are an artifact of the disproportional loss (attrition) of less serious offenders among those who had had police contacts

TABLE 2. DISTRIBUTION OF JUVENILE OFFICIAL RECORD OFFENDER TYPES VS. ADULT TYPES FOR 1976-DEFINED CONTINUOUS RESIDENTS VS. 1988-DEFINED CONTINUOUS RESIDENTS, 1955 COHORT

		Inner City			No Drug Contacts		
J u v e n i l e		Police Contacts for Drugs					
Traffic or -							
	1976	24.4	.0	.0	3.0	2.3	64.2
	1988	17.8	.0	15.6	3.1	1.6	61.5
Minor Misdemeanor							
	1976	9.7	.0	.0	1.3	1.3	10.9
	1988	6.7	.0	17.4	.8	1.9	11.3
Major Misd & Felony							
	1976	53.7	4.9	7.3	5.6	1.3	10.2
	1988	37.8	2.2	8.9	6.6	1.9	11.3
A d u l t		Maj Misd & Fel	Min Misd	Traf or Less	Maj Misd & Fel	Min Misd	Traf or Less
	1976	N = 41	C = .228		N = 394	C = .352	
	1988	N = 45	C = .363		N = 259	C = .442	

		Non-Inner City			No Drug Contacts		
J u v e n i l e		Police Contacts for Drugs					
Traffic or -							
	1976	26.3	.0	.0	1.5	2.0	83.9
	1988	23.6	1.8	10.9	1.7	2.2	82.8
Minor Misdemeanor							
	1976	5.3	.0	6.6	.9	.5	4.7
	1988	3.6	.0	3.6	.9	.5	5.0
Major Misd & Felony							
	1976	30.3	3.9	27.6	1.1	.7	4.7
	1988	27.3	3.6	25.5	1.3	1.3	4.9
A d u l t		Maj Misd & Fel	Min Misd	Traf or Less	Maj Misd & Fel	Min Misd	Traf or Less
	1976	N = 76	C = .425		N = 1266	C = .287	
	1988	N = 55	C = .192		N = 778	R = .281	

for drug offenses. Those 1988-defined continuous residents (extended cohort) who remained from the 1976-defined continuous residents produced essentially the same relationship between juvenile and adult careers as obtained with the original 1955 Cohort. This chapter provides additional evidence that a cohort reduced by attrition over a period of more than 10 years should still be useful in the kinds of analyses which we have proposed.

Chapter 6

THE EVOLVING NATURE OF THE PREDICTION PROBLEM

Introduction

We have already touched on the fact that cavalier statements about the relationship of drugs to delinquency and crime have been of little help in understanding the genesis of delinquency and crime or how these problems may be ameliorated in an urban, industrial society. On the other hand however, the Racine data suggest that alcohol and drugs may have a catalytic influence on some patterns of continuity in delinquency and crime, and will improve our ability to predict career continuity. Before continuing with the details of how predictive efficiency may be enhanced through use of alcohol and drug involvement as a predictor we must, however, turn back to a brief summary of our prior prediction research and why we are led to believe that alcohol and drugs do play a part in the development of some types of delinquent and criminal careers beyond those that involve the production and distribution of drugs. Understanding process leads to sophisticated prediction rather than whimsical selection of predictors.

Early Attempts to Predict Crime from Delinquency in the Racine Cohorts

Three tables are presented from "Risk Assessment vs. Real Prediction," (Shannon 1986b) and in these it is quite apparent that the proportion of those persons who had continuity after any given age (5 or more police contacts) was greatest for those who had frequent and early police contacts. The effect of number of contacts on continuity is clearly shown for age 17 in each cohort in Table 1. It was our experience that other researchers considered this to be very solid evidence that frequent police contacts at an early age was a prelude to continuity into adult crime. Although there was a greater likelihood that this would happen, early police contacts and exposure to the juvenile justice system and to some extent the opposite, i.e., no early police contacts, might make for accurate prediction of what would happen to cohort members in the tails of a distribution but not much more than that. Prediction for those in the middle range of juvenile experience was not accurate.

The same may be said for the percentages who had at least one police referral after any given age (Table 2 which is composed of three additional tables from Criminal Career Continuity: Its Social Context, [Shannon, 1988]). In this table we have presented Pearson's R as a measure of the relationship between number of police referrals through an age to number of

TABLE 1. POLICE CONTACT CONTINUITY IN BIRTH COHORTS

Table VIII. Percentage of Cohort with Five or More Contacts After Age (Years) by Number of Contacts Prior to and at Age (Years): 1942, 1949, and 1955 Cohort Members with Continuous Residence*

Number of contacts through age	1942 COHORT															
	Percentage of 1942 cohort with five or more contacts after age															
	8	9	10	11	12	13	14	15	16	17	18	19				
0	27	26	26	25	24	23	19	14	10	7	5	4				
1	88	90	86	88	70	69	58	52	30	19	15	11				
2	—	67	80	100	100	86	74	67	58	38	19	11				
3	—	—	—	50	86	80	75	67	67	53	35	24				
4	—	—	—	—	—	100	100	89	67	56	58	35				
5 or +	—	—	—	—	—	50	71	83	76	75	65	59				
Median number of contacts by age at first contact	11.0	14.5	17.5	16.0	6.0	10.5	8.0	8.3	3.7	2.4	3.3	2.0				
	PERCENT INCREASES															
Number of contacts through age	Percentage of 1942 cohort with five or more contacts after age															
	20	21	22	23	24	25	26	27	28	29	30					
0	2	1	1	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0				
1	11	8	6	3	2	2	2	1	0.0	0.0	0.0	0.0				
2	6	2	7	3	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
3	8	11	3	3	3	2	0.0	0.0	0.0	0.0	0.0	0.0				
4	43	35	13	0.0	4	4	0.0	0.0	0.0	0.0	0.0	0.0				
5 or +	51	45	44	39	31	27	24	13	9	5	2					
Median number of contacts by age at first contact	3.6	1.9	2.0	2.1	1.3	1.4	1.5	1.2	1.5	1.1	1.1					
	PERCENT DECREASES															
Number of contacts through age	1949 COHORT															
	Percentage of 1949 Cohort with five or more contacts after age															
	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
0	24	23	22	20	18	16	14	10	6	3	2	1	0.6	0.2	0.2	0.0
1	67	61	56	54	45	38	35	30	22	12	5	2	2	1	0.8	0.0
2	100	90	80	75	71	59	47	42	33	20	12	8	4	0.6	0.6	0.0
3	100	100	100	100	93	77	83	69	48	25	18	10	5	2	—	0.0
4	—	—	100	100	88	93	63	72	67	49	28	19	10	7	4	0.0
5 or +	100	100	100	100	100	100	100	83	80	62	51	42	33	23	12	5
Median number of contacts by age at first contact	9.0	12.0	10.5	6.8	6.2	4.3	5.3	5.0	3.5	2.4	2.0	1.5	1.4	1.5	1.2	1.2
Number of contacts through age	1955 COHORT															
	Percentage of 1955 Cohort with five or more contacts after age															
	8	9	10	11	12	13	14	15	16	17	18	19	20			
0	17	15	14	12	11	9	7	5	3	1	0.5	0.0	0.0			
1	58	47	43	36	32	30	20	15	8	4	2	0.5	0.0			
2	85	76	76	67	50	45	38	28	18	8	4	2	0.0			
3	100	100	82	71	76	68	57	40	29	17	7	3	0.0			
4	100	100	100	91	72	71	68	58	40	24	16	3	1			
5 or +	100	100	92	96	94	86	79	75	62	46	34	21	7			
Median number of contacts by age at first contact	6.1	5.1	5.3	4.2	3.4	5.0	3.0	2.4	2.2	2.1	1.2	1.1	1.5			

*Source: Shannon (1982, Table 3).

TABLE 2. REFERRAL CONTINUITY IN BIRTH COHORTS

TABLE 3. PERCENT WITH ANY POLICE REFERRAL AFTER AGE BY NUMBER OF REFERRALS PRIOR TO AND AT AGE: COHORT MEMBERS WITH CONTINUOUS RESIDENCE

Number of Referrals Through Age	PERCENT OF 1942 COHORT WITH REFERRALS AFTER AGE																1942 COHORT									
	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30			
0	37	37	37	37	37	37	35	32	26	20	17	15	12	11	10	8	6	6	5	4	3	2	1			
1	100	100	100	100	100	75	73	76	56	45	37	34	30	30	26	23	15	13	11	7	4	1	0			
2	----	----	----	0	0	0	50	78	68	62	55	41	43	37	33	26	23	21	15	19	7	2				
3	----	----	----	----	----	----	100	100	100	93	74	61	56	53	50	42	36	38	36	24	17	11	7			
4	----	----	----	----	----	----	----	100	100	75	82	57	68	59	50	47	33	33	25	7	6	0	0			
5 or +	----	----	----	----	----	----	----	100	100	75	91	94	94	88	83	72	69	67	62	59	41	22	7			
Lambda	.004	.004	.008	.004	.004	.000	.004	.009	.030	.028	.018	.034	.044	.083	.081	.047	.056	.048	.066	.079	.087	.080	.125			
Somers' D	.697	.697	.707	.506	.623	.420	.463	.548	.432	.401	.386	.343	.356	.343	.327	.296	.251	.241	.220	.184	.139	.064	.024			
Pearson's R	.119	.119	.300	.215	.238	.204	.176	.328	.362	.415	.469	.484	.502	.498	.508	.513	.492	.491	.454	.435	.525	.464	.377			

Number of Referrals Through Age	PERCENT OF 1949 COHORT WITH REFERRALS AFTER AGE																1949 COHORT						
	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23							
0	37	37	36	36	36	35	34	31	25	17	13	10	8	6	3	2							
1	50	80	75	80	86	80	82	73	60	40	32	26	22	16	9	4							
2	----	----	----	----	100	100	100	88	71	55	48	44	37	23	16	7							
3	----	----	----	----	----	100	100	70	87	63	57	46	34	26	21	9							
4	----	----	----	----	100	----	100	100	86	65	65	52	48	41	33	20							
5 or +	----	----	----	----	100	100	100	88	87	87	74	66	51	41	17								
Lambda	.000	.000	.000	.000	.006	.006	.011	.016	.012	.019	.039	.038	.053	.073	.082	.057							
Somers' D	.307	.599	.561	.612	.667	.621	.671	.590	.499	.370	.347	.303	.266	.224	.161	.075							
Pearson's R	.083	.146	.150	.157	.194	.290	.379	.467	.529	.538	.592	.553	.513	.547	.492	.289							

Number of Referrals Through Age	PERCENT OF 1955 COHORT WITH REFERRALS AFTER AGE																1955 COHORT			
	8	9	10	11	12	13	14	15	16	17	18	19	20							
0	34	33	33	33	32	30	27	24	19	13	10	5	3							
1	0	67	86	78	74	76	66	55	37	26	18	12	7							
2	----	100	100	100	100	89	87	73	62	46	36	27	15							
3	----	----	----	100	100	100	82	88	73	63	45	35	21							
4	----	100	----	100	100	100	80	77	67	61	59	39	16							
5 or +	----	----	100	75	88	96	95	88	83	69	60	53	35							
Lambda	.000	.003	.004	.007	.011	.014	.019	.027	.029	.033	.024	.036	.046							
Somers' D	-.336	.689	.794	.704	.680	.687	.608	.526	.412	.320	.257	.224	.136							
Pearson's R	-.008	.182	.200	.311	.449	.524	.519	.542	.549	.537	.498	.485	.335							

referrals after that age. Somers' D is an asymmetric measure of association. Guttman's coefficient of predictability (Lambda) is a measure of proportional reduction in error. We have always been extremely critical of our own prediction data because the percentage reduction in error is small. In only one case is more than 35% of the variance accounted for, that being at age 18 for the 1949 Cohort. This is not much if the point is supposed to be that number of referrals before any age accounts for referrals after that age.

It is always possible, of course, to engage in cutting point roulette, that is, to select some cutting points which are at a meaningful age such as 18 and see how much error is reduced by knowledge of the predictor. Table 3 (Shannon, 1985b) is an example where knowing whether a cohort member was involved with the police three or fewer times as a juvenile permitted prediction of who would be involved four or fewer times as an adult with a 23.2% proportional reduction in error. The 1942 Cohort's proportion of false positives (35 divided by 97 = .361) was quite high compared with the proportion of false negatives (54 divided by 536 = .101) and for this cohort as well as the 1949 and 1955 Cohorts would preclude its use in any decision-making process.

Let us go back even further and examine a few 2 X 2 tables using dichotomized data from our first lengthy report (Shannon, 1980a). These tables (Table 4) have been set up so that the proportion of false negatives and false positives is shown in parentheses for each. The proportion of false negatives declines from cohort to cohort, in the first panel of Table 4 from 47.5% to 26.7%, as did the proportion of the cohort that had police contacts age 18 or older, a function of the declining number of years at age 18 or older from cohort to cohort. We have also shown that if years of exposure after age 18 or 21 are controlled there is an increase in number, seriousness, and continuity of police contacts from cohort to cohort rather than the decline in continuity shown in this uncontrolled table. The proportion of false positives increased from cohort to cohort as did the proportion who did not have a police contact at age 18 or older, as would also be expected as a consequence of fewer years of exposure.

Pearson's R and Somers' D indicated that the relationship of number of cohort members with police contacts before and after age 18 remained approximately the same from cohort to cohort. Lambda indicated little improvement in predictability over the modal category of the 18 or later marginals except for the 1949 Cohort. Although RIOC, Relative Improvement Over Chance, 51% for the 1942 Cohort to 33% for the 1955 Cohort, is indicative

TABLE 3. PREDICTING POLICE INVOLVEMENT AFTER AGE 18

Table XII. Predicting Individual Involvement with Police After Age 18 Years from Involvement Through Age 18 Years

1942 Cohort			
Involvement through age 18	Involvement with police after age 18		Total
	0-4	5 or +	
0	333	(17) ^a	350
1-3	149	(37)	186
4 or +	FALSE POSITIVES 35	62	97
Total	517	116	633

FALSE NEGATIVES
54

14.0% error with prediction device
18.3% error from modal category of marginals
23.2% proportional reduction in error using prediction device

1949 Cohort			
Involvement through age 18	Involvement with police after age 18		Total
	0-1	3 or +	
0	558	(40)	598
1-3	365	(92)	457
4 or +	(87)	155	242
Total	1010	287	1297

16.8% error with prediction device
22.1% error from modal category of marginals
23.6% proportional reduction in error using prediction device

1955 Cohort			
Involvement through age 18	Involvement with police after age 18		Total
	0-1	2 or +	
0	1012	(66)	1078
1-3	580	(132)	712
4 or +	(166)	193	359
Total	1758	391	2149

16.9% error with prediction device
18.8% error from modal category of marginals
6.9% proportional reduction in error using prediction device

^aFalse positives and false negatives appear in parentheses.

TABLE 4. PREDICTING POLICE CONTACTS AND FELONIES AND MISDEMEANORS AGE 18 AND LATER FROM PRIOR POLICE CONTACTS AND FELONIES AND MISDEMEANORS: 1942, 1949, AND 1955 COHORTS

		1942			1949			1955		
		FALSE NEGATIVES								
		Police Contact Age 18 or +			Police Contact Age 18 or +			Police Contact Age 18 or +		
		No	Yes	Total	No	Yes	Total	No	Yes	Total
Police Contact Before Age 18	No	199 (52.5)*	180 (47.5)	379 (59.9)	400 (59.4)	273 (40.6)	673 (51.9)	881 (73.3)	321 (26.7)	1202 (55.9)
	Yes	49 (19.3)	205 (80.7)	254 (40.1)	166 (26.6)	458 (73.4)	624 (48.1)	402 (42.4)	545 (57.6)	947 (44.1)
Total		248 (39.2)	385 (60.8)	633 (100.0)	566 (43.6)	731 (56.4)	1297 (100.0)	1283 (59.7)	866 (40.3)	2149 (100.0)
FALSE POSITIVES		Pearson's R .3335			Pearson's R .3307			Pearson's R .3122		
		Somers' D .3321			Somers' D .3283			Somers' D .3084		
		Lambda .0766			Lambda .2244			Lambda .1651		
		RIOC .5100			RIOC .3794			RIOC .3367		
		1942			1949			1955		
		Felony or Misdemeanor Age 18 or +			Felony or Misdemeanor Age 18 or +			Felony or Misdemeanor Age 18 or +		
		No	Yes	Total	No	Yes	Total	No	Yes	Total
Felony or Misdemeanor Before Age 18	No	332 (74.8)	112 (25.2)	444 (70.1)	650 (77.9)	184 (22.1)	834 (64.3)	1210 (81.6)	272 (18.4)	1482 (69.0)
	Yes	61 (32.3)	128 (67.7)	189 (29.9)	195 (42.1)	268 (57.9)	463 (35.7)	326 (48.9)	341 (51.1)	667 (31.0)
Total		393 (62.1)	240 (37.9)	633 (100.0)	845 (65.2)	452 (34.8)	1297 (100.0)	1536 (71.5)	613 (28.5)	2149 (100.0)
		Pearson's R .4009			Pearson's R .3602			Pearson's R .3358		
		Somers' D .4250			Somers' D .3582			Somers' D .3277		
		Lambda .2792			Lambda .1615			Lambda .0245		
		RIOC .4786			RIOC .3677			RIOC .3569		

* The small percent figures in parentheses in the 2x2 tables add to 100% across and the small percent figures under the totals on each marginal add to 100%. Improvement over a prediction from the modal category (largest percent) of the marginals by the use of the predictor is possible only if two diagonal figures in the 2x2 tables are lower than the non-modal number of the lower marginals. In this case: 49 + 180 = 229, which is lower than 248.

of considerable improvement over chance, we continue to take the stance that Lambda is a more realistic measure. Even if there is considerable improvement over chance, the modal category of the marginals may still be the best predictor and Lambda tells us if this is the case.

On the other hand, if we are concerned about predicting serious adult offenders from serious juvenile offenders the results may differ. In the bottom panel we see those with felonies or misdemeanors, the proportions of those cohort members who have contacts at this level being considerably lower than that for all contacts. While the Pearson's Rs and Somers' Ds are higher, Lambda, .28% for the 1942 Cohort, declines from cohort to cohort. The RIOCs are similar to those presented in the upper panel of the table. Changing the definition of seriousness to felony or major misdemeanor still produced Pearson's Rs ranging from .25 to .35, Somers' Ds from .23 to .29, but the distributions were now so skewed that Lambda was zero.

Schmidt and Witte (1988) expressed similar concern about false positive rates which are so high that a sizeable proportion of non-recidivists or non-continuers would be dealt with as though they would be in the recidivist or continuer category. The bottom line on their validation sample was 47% false positives and 28% false negatives, although extremes of the scale yielded fewer proportional errors. This was similar to the 1955 Cohort errors in predicting who would have a police contact and the 1955 Cohort for who would have a felony or misdemeanor at age 18 or later. Their concerns about the prediction problem were detailed earlier in Schmidt and Witte (1987).

The stochastic nature of official careers, a finding which we had dealt with (Shannon, 1988) has been one of the prime reasons we and others believe that combining official and self-report measures would generate a better estimate of total careers than would either alone. Unfortunately, the 1942 and 1949 self-report schedules did not use categories which permitted combining reports. This is one of the reasons we hope to eventually present self-report schedules to the 1955 Cohort that will produce responses comparable to official categories and provide a basis for combining the two data sets for a smoother representation of careers.

Lacking this, we have examined official careers within categories developed from interview data. In Table 5 there are four groups of 1949 Cohort members who were interviewed. We would expect that those who stated that they had not been stopped by the police before 18 and who also stated that they hadn't done things for which they could have been caught would have a much larger proportion who had not had police contacts before or after 18

TABLE 5. RELATIONSHIP OF SELF-REPORTED POLICE CONTACT STATUS PRIOR TO AGE 18 TO POLICE CONTACT STATUS AGES 18+ : PERSONS INTERVIEWED 1949 COHORT

Before Age 18

Police Contacts Age 18 or +

Felonies or Misdemeanors Age 18 or +

Not Stopped by Police Before 18 and Didn't Do Things for Which Not Caught

		No	Yes	Total
Police Contacts Prior to 18	No	49 (62.0)	30 (38.0)	79 (81.4)
	Yes	8 (44.4)	10 (55.6)	18 (18.6)
Total		57 (58.8)	40 (41.2)	97 (100.0)
Pearson's R		.1388		Lambda .0500
Somers' D		.1758		RIOC .2727

FALSE NEGATIVES

		No	Yes	Total
Police Contacts Prior to 18	No	67 (84.8)	12 (15.2)	79 (81.4)
	Yes	13 (72.2)	5 (27.8)	18 (18.6)
Total		80 (82.5)	17 (17.5)	97 (100.0)
Pearson's R		.1287		Lambda .0000
Somers' D		.1259		RIOC .1428

FALSE POSITIVES

Not Stopped by Police but Did Things for Which Not Caught

		No	Yes	Total
Police Contacts Prior to 18	No	51 (59.3)	35 (40.7)	86 (67.7)
	Yes	13 (31.7)	28 (68.3)	41 (32.3)
Total		64 (50.4)	63 (49.6)	127 (100.0)
Pearson's R		.2581		Lambda .2381
Somers' D		.2760		RIOC .3810

		No	Yes	Total
Police Contacts Prior to 18	No	70 (81.4)	16 (18.6)	86 (67.7)
	Yes	21 (51.2)	20 (48.8)	41 (32.3)
Total		91 (71.7)	36 (28.3)	127 (100.0)
Pearson's R		.3131		Lambda .0000
Somers' D		.3018		RIOC .3333

Stopped by Police Before 18 but Didn't Do Things for Which Not Caught

		No	Yes	Total
Police Contacts Prior to 18	No	27 (69.2)	12 (30.8)	39 (54.9)
	Yes	17 (53.1)	15 (46.9)	32 (45.1)
Total		44 (62.0)	27 (38.0)	71 (100.0)
Pearson's R		.1651		Lambda .0000
Somers' D		.1611		RIOC .2000

		No	Yes	Total
Police Contacts Prior to 18	No	36 (92.3)	3 (7.7)	39 (54.9)
	Yes	21 (65.6)	11 (34.4)	32 (45.1)
Total		57 (80.3)	14 (19.7)	71 (100.0)
Pearson's R		.3337		Lambda .0000
Somers' D		.2668		RIOC .6520

Stopped by Police Before 18 and Did Things for Which Not Caught

		No	Yes	Total
Police Contacts Prior to 18	No	50 (53.2)	44 (46.8)	94 (36.3)
	Yes	40 (24.2)	125 (75.8)	165 (63.7)
Total		90 (34.7)	169 (65.3)	259 (100.0)
Pearson's R		.2923		Lambda .0667
Somers' D		.2895		RIOC .2982

		No	Yes	Total
Police Contacts Prior to 18	No	71 (75.5)	23 (24.5)	94 (36.3)
	Yes	70 (42.4)	95 (57.6)	165 (63.7)
Total		141 (54.4)	118 (45.6)	259 (100.0)
Pearson's R		.3197		Lambda .2119
Somers' D		.3311		RIOC .4651

than would those cohort members who admitted having been stopped by the police and who also stated that they had done things for which they were not caught. That was the case. Less continuity was found for those who had not been stopped and who had not done things than was found for those who had been stopped and who had done things. False positives (24.2%) were lowest for those in the group that had been stopped and had done things while false negatives were lower in the other groups. Again, while improvement over chance was considerable, ranging up to 62%, most Lambdas were very low or zero and the highest showed an improvement over the modal category of the adult marginals of only 24%.

These tables are presented only to reacquaint the reader with the nature of the prediction problem which becomes increasingly difficult as the level of seriousness to be predicted is raised. For example, if we wish to predict who will have a felony contact at age 18 or older we are confronted with the fact that only 176 (8.2%) of the 1955 Cohort had felony contacts at that age or later. If having a contact at the felony level is used as the predictor of those who will have a felony as an adult, 236 errors are made (100 false positives and 136 false negatives), 60 more than if it was predicted that no one would have a felony contact.

In addition to the exercises in prediction that we have just described, we also examined the relationship of past referrals to number of future contacts and seriousness of future contacts at ages 15 and 21 with and without controls for juvenile place of residence (inner city and interstitial areas), number and seriousness of past contacts to number of future court dispositions, number of past dispositions to number and seriousness of future dispositions, and many other combinations. We usually found little increase in predictive efficiency over the adult modal category of the juvenile distributions within categories, seldom over 20%, that most often when utilizing past referrals as a predictor of future police contacts. Number of dispositions during the teens and early 20s and contacts or dispositions in the future produced high asymmetric Somers' Ds but generally low Lambdas.

We make this point so frequently because the Pearson's Rs and Somers' Ds have ranged in the .40s and .50s, some Somers' Ds into the .80s, depending on age, giving the impression that there must indeed be a substantial relationship between delinquent and criminal careers. Giving the false impression that we had developed a predictive instrument that could be applied to the decision-making process would be an error. Producing statistics that serve as a basis for seriously considering the advisability of proceeding down

the path to selective incapacitation is another. Suggesting that certain categories are unlikely to have criminal career continuity is still another strategy but each must be pursued with caution until it has been shown that multiple cohorts in diverse settings produce similar results beyond such things as simple percentages of small groups responsible for major proportions of serious delinquency and crime.

Even when we reached the point of relating severity of past sanctions to number and seriousness of future contacts, we produced only very low Lambdas except in the case of severity of past sanctions and severity of future sanctions. Here we found, particularly in the inner city and interstitial areas, that some Lambdas were in the high .20s, this in spite of very skewed distributions. It is not surprising, of course, that those with serious past sanctions continued to acquire serious sanctions in the future.

One last mention should be made of our earliest attempts at predicting seriousness of adult criminal careers as measured by either official record data or self-report data. When a variety of juvenile records, background, and attitudinal variables were utilized as the independent variables, as high as 52% of the variance in adult seriousness was accounted for but this differed by sex and cohort. Although type of neighborhood of socialization and juvenile seriousness usually had the greatest direct effects, attitudes toward school and school performance, type of juvenile associates, automobile use, race, and head of household's sex also appeared as significant effects in the various analyses.

We could not help but conclude that these analyses were lacking a theoretical structure that linked the independent variables to the various measures of adult involvement with the justice system. We asked ourselves if the research had been conceptualized as a social problem rather than a sociological problem, did the variables transcend historical events and demographic statuses so that we were closer to a description of social processes, that which we must surely have if prediction was to become more efficient than that which could be achieved by utilizing atheoretical prediction categories, demographic variables, or experiences which could develop simultaneously with delinquent and/or criminal behavior or even be a product of them.

What all of this did seem to support was that those juveniles who lacked integration into the larger society were most likely to become involved in delinquency and continue into adult crime, that the kinds of areas in which they were socialized played a part in the process, and that involvement with

the justice system produced interaction that increased and generated continuity and/or more serious involvement. Understanding this would enable us to move on to more effective prediction involving the focus of attention on the organization of society as well as the individual whose behavior we wished to predict.

Turning to the Structure of Society and a Basis for Reformulating the Prediction Problem

It would probably be correct to say that the final report for our second research project, The Relationship of Juvenile Delinquency and Adult Crime to the Changing Ecological Structure of the City (Shannon, 1982), an attempt to develop an empirical basis for describing the relationship of delinquency and crime to the ecological structure of the city, had methodological and then general descriptive value but contributed little but complexity to the prediction problem. It did provide a setting in which to examine criminal career continuity and we did develop the concept of the "hardening of the inner city."

Our greatest success was not in increasing the effectiveness of predicting what individuals would do but in reaffirming what has been termed the ecological position at the very time that others in sociology were again turning to it. The inner city and interstitial areas in Racine were developing delinquency and crime as traditional patterns of behavior as had Chicago and other major metropolitan areas earlier in the century.

Having perhaps more than whetted our appetite, we launched into a third project, The Development of Serious Criminal Careers and the Delinquent Neighborhood (Shannon, 1984a). This gave us further opportunity to determine not just how delinquency and crime varied within neighborhoods and categories of neighborhoods but to see that predictions would differ depending on race/ethnicity, sex, and type of neighborhood.

Perhaps one of the most important findings was that when measures of serious delinquency and serious adult criminal behavior were regressed on 14 and 16 interview variables with the 1942 and 1949 Cohorts divided into categories according to the offense rates of the areas (low, medium, and high) and the delinquency and crime producing characteristics (DCP) of the area (low, medium, and high), the pattern of variable effects differed for each 12 combinations of offense/DCP areas, whether measures were for the juvenile or adult period and whether the measure was official or self-report.

Most frequently appearing for the juvenile period, particularly in high offense rate and DCP areas was head of household's employment status and

respondent's attitude toward the police. High school graduation, self-concept, juvenile friends in trouble, and auto use appeared in all types of areas. Some of these and other variables had significant effects for the adult period but the point is that although the original R^2 s for official seriousness rates for the juvenile period for those who resided in high DCP and high offense rates areas were in the .400 range and the adult seriousness scores had R^2 s in the same range, these did not produce predictions that are accurate enough for application to the decision-making situation.

When controls were introduced for race, sex, and inner city residence, each group again had dissimilar patterns of significant effects on seriousness scores. Not surprising was the similarity in effects for inner city and Black cohort members, realizing that less than half of the inner city cohort members are Black.

Beyond this we found that juvenile seriousness scores for the Whites still had greater effects on adult measures than did any single interview-obtained variable, with the exception of high school graduation for non-inner city youth. For the Blacks, early age of driver's license, lack of steady employment of head of household, and lower-level first job had greater significant effects on official seriousness than did juvenile seriousness. But, even though over 50% of the variance in adult seriousness scores was accounted for by combinations of juvenile experiences and conditions, we must still deal with the fact that variable effects differ depending on combinations of race, sex, and place of residence.

Most of the variables that have been measured by interview questions are proxy variables for integration into the larger society or integration into a peer group society that has goals and values differing from those of the larger society. Some variables which have been thought of as integrating may not integrate juveniles into those segments of the larger society which operate as agencies of social control so that integration has deleterious consequences rather than ameliorative effects.

Summary

All of this was very complex but even if it did not produce a prediction device that accounted for sufficient amounts of the variance to be used in the decision-making process because the data are only available about the time that juveniles became adults, if then, it has contributed to the prediction enterprise. It suggests that juvenile delinquents and adult criminals are products of life experiences in different types of neighborhoods and that these experiences have different effects on people whose lives are framed by

their race and sex. This has been stated in the sociological literature in more general terms but we apply it here as we look back at our earlier research on delinquency and crime.

The fact that inner city non-White males have the highest juvenile and adult seriousness scores, followed by inner city Whites, that they have the lowest level first jobs, the lowest high school graduation rate, the most negative attitude toward the police, etc., may be known to researchers and police, but its meaning, how it comes about, and how these variables are interrelated comes only from examining the data as we have done. And what we have found is that the answer is not very simple. Similarly, as we revealed in Chapter 1, how drugs and alcohol have been shown to be related to delinquency and crime, is extremely complex. Within the framework that is provided for people in diverse urban milieus, drugs and alcohol use may or may not be a mechanism for integration into various societal subgroups, may be the source of behavior that impedes integration into the larger society, or may be a product of the failure to integrate which has had its roots in other maladaptive experiences that are peculiar to some kinds of neighborhoods but not to others. Thus, both alcohol and drug use must be examined in diverse societal settings and with controls for race and sex.

Chapter 7

A REVIEW OF THE RACINE TYPOLOGY WORK AND CONSIDERATION OF A DIFFERENT PERSISTENCE DIMENSION

Introduction

References to delinquent and criminal types have thus far been brief because our work on typology was only brought in to buttress our argument that the enterprise was worthwhile if, for no other reason, than that it revealed the complexity of careers and suggested the catalytic effects of drug offense/use on continuity in careers.

Our National Institute of Justice project, Prediction and Typology Development (Shannon, 1987), marked a return to our original concern, predicting adult criminal behavior from juvenile delinquency. The basic idea was to determine if combinations of police contact data and how the justice system had responded to police contacts would improve predictive efficiency over contact, demographic, and ecological data. It was, of course, shown that for each variable the proportion of Black persons having an event during each age period, juvenile, 18-20, and 21 and older, markedly increased by cohort, a phenomenon that made the use of demographic data (including sex) tempting as a predictor. We have not succumbed to this approach.

Developing offender typologies and testing their empirical validity was the first step in the larger task of predicting adult careers from juvenile careers using scores which represented a constellation of events rather than the sums of events. What we had in mind was to use the Gibbons typology (1965, 1975, 1982) as a starting point; would these types or any other constructed types found in the literature (Chaiken and Chaiken, 1982) based on samples or populations of institutionalized offenders approximate our computer-generated types? These typologies were not very useful because they consisted of categories for people at the serious end of the continuum of offenders. As we and others have shown, and the critics of longitudinal studies have made much of, only a small percent of a birth cohort will be at the serious end of the continuum. Table 19 (from Criminal Career Continuity) reveals that throughout their entire youth and young adult careers only 21.7% of the males in the 1955 Cohort had a felony-level offense in their records. Although this defined only slightly more than 20% of the males as what could be considered serious offenders, it did suggest that there are sufficient serious offenders in a large cohort to carry out an attempt at typology construction. Our task

was to computer-construct a typology which would place cohort members in a fairly wide range of types, realizing that there would be relatively few chronically serious offenders.

Computer Constructed Typologies

Inherent in each type of delinquent career, it was hypothesized, would be a combination of events with a varied likelihood of producing continuity into adult crime. While in the pre-computer days the interrelations of variables making for continuity might be discerned by lengthy experience with delinquents and criminals, computer programs can cluster cohort members into relatively homogeneous groups (the larger the number of groups, the more homogeneous is each group), rank them in a way consistent with their content, and determine which group produced the largest proportion of continuity into adult crime or the most serious of the adult criminal types, the latter also determined by computer.

This took us a long way from Shaw's (1931) model of delinquency which saw it as gradually expanding from minor depredations to more serious index offenses, perhaps leading to adult crime. It was also quite different from models of delinquency which concerned themselves with specialization, offender types as it were, such as vandals, shoplifters, and, as adults, burglars and embezzlers. The possibility that computer-constructed types would be more efficient as predictors than additive scale scores, weighted or unweighted, seemed reasonable because these types would represent groups of offenders with police contacts consisting of meaningful clusters of offenses rather than scores which could be obtained in a variety of ways but which did not tell us about the content of careers. They would not be specialized types of offenders but types in terms of what happens in the world of misbehavior. Furthermore, the juvenile types might be more closely linked to adult types than were simple juvenile scores linked to simple adult scores.

There has been a vast literature on measurement, prediction, classification, and typology development (Robison, 1936; Reiss, 1951; Meehl, 1954; Stott, 1960; Voss, 1963; Sellin and Wolfgang, 1964; Toby, 1965; Martin and Klein, 1965; Hirschi and Selvin, 1967; Blumstein and Cohen, 1979; Monahan, 1978; Williams, 1980; Wilkins, 1980; Brennan, 1980; Monahan, 1981; Monahan, 1982; Rhodes, Tyson, Weekeley, Conly, and Powell, 1982), to mention a few. There have, of course, been a number of excellent assessments of the prediction problem (Welford, 1967; Gottfredson, 1970; Chaiken and Chaiken,

1984; Gottfredson and Tonry (1987), Schmidt and Witte (1987, 1988). In essence, anyone who attempts to increase predictability above chance must realize at the outset that it will be a difficult endeavor. Thus it is that prediction of what individuals will do in the future does not come as easily as the prediction of what proportion of a group will engage in delinquent or criminal behavior in the future.

We thought that our first attempt to develop a computer typology was completely atheoretical but, as we look back, had been quite explicit in stating that continuity was a consequence of the process of social interaction between a number of actors (offender, police, court, social workers, court officers, judges, probation officers, and institutional personnel) and that insofar as continuity developed, it was a process of generation through social interaction as opposed to simple, willful, decision-making by certain types of people. Our procedure was to subject data on offense seriousness, police response, and court sanctions by age period to the SAS FASTCLUS routine so that each person was placed in one of 23 different offender/justice system reaction types, as shown in Table 1. This gave us an idea of how well people clustered. For example, the eight most serious offender types in the 1942 Cohort contained only 5.1% of the cohort but each person in these clusters had had police contacts for felonies and Part I offenses. They accounted for 80.7% of all felonies by members of that cohort. The 1949 Cohort produced seven types of felony/Part I offenders who constituted 4.5% of the cohort and accounted for 74.7% of their felonies. It took only four types making up 5.0% of the 1955 Cohort to account for 75.7% of its felonies. If three more types were added, all felonies and Part I offenders, 7.4% of the 1955 Cohort accounted for 87.2% of its felonies.

This approach enabled us to spoon out a highly disproportional share of the serious offenders and, having identified them, to focus attention upon them. For example, for the 1949 Cohort they accounted for 65.7% of the felonies against property but only 13.1% of those against persons. All cohort members in these types were male (they constituted 8.1% of the males), disproportionately Black, and/or socialized in the Inner City. Looking at disproportionality differently, these serious offenders constituted 3.4% of the Whites, 10.4% of the Chicanos, and 18.0% of the Blacks--so, most Whites, Chicanos, and Blacks were not included in the serious offender clusters.

TABLE 1. COMPARISON OF COHORT CLUSTER DISCRIMINATION

1942 COHORT							1949 COHORT							1955 COHORT								
Cluster Rank	#	% in Cluster with		% Cohort Offenses Accounted for		Ratio % Fels to Prop. Pop. in Cluster	% Pop. in Cohort	Clus #	% in Cluster with		% Cohort Offenses Accounted for		Ratio % Fels to Prop. Pop. in Cluster	% Pop. in Cohort	Clus #	% in Cluster with		% Cohort Offenses Accounted for		Ratio % Fels to Prop. Pop. in Cluster	% Pop. in Cohort	
		Fel	Part I	Felony	Part I				Fel	Part I	Felony	Part I				Fel	Part I	Felony	Part I			
1	15	100	100	24.2	15.4	41.4	.5	11	100	100	13.1	10.6	24.9	.5	15	100	100	29.9	25.7	19.2	1.4	
2	8	100	100	9.7	6.9	18.4	.5	20	100	100	10.1	6.0	21.8	.4	2	100	100	3.6	2.7	21.5	.2	
3	22	100	100	3.2	3.4	23.0	.2	13	100	100	10.6	7.1	18.0	.5	9	100	100	18.4	17.0	12.4	1.3	
4	21	100	100	3.2	1.1	11.5	.2	2	100	100	19.7	13.0	16.8	1.1	20	100	100	23.8	16.3	8.6	2.1	
5	11	100	100	19.4	13.1	9.3	1.6	17	100	100	6.6	7.0	11.2	.5				75.7	61.7		5.0	
6	18	100	100	8.1	4.6	8.6	.8	7	100	100	12.6	7.5	6.5	1.2	17	100	100	3.8	5.6	10.4	.5	
7	1	100	100	8.1	6.3	11.5	.8	21	100	100	2.0	3.3	7.7	.3	8	100	100	3.3	3.8	5.1	.7	
8	20	100	100	4.8	2.9	9.2	.5				74.7	54.5		4.5	12	100	100	4.4	3.6	3.2	1.2	
				60.7	53.7		5.1	9	100	67	3.5	1.1	5.9	.7	11	100	33			.3	4.6	.4
9	10	100	66	4.8	4.0	11.6	.5	14	71	86	1.5	2.7	4.4	.5	22	100	35	.8	.6	4.2	.8	
10	7	100	33	4.8	1.1	9.2	.5	6	40	100	5.6	5.9	3.8	1.2	14	83	70	4.3	4.1	2.9	1.9	
11	17	13	100	4.8	11.4	1.4	2.4	12	38	100	2.0	2.9	2.5	.6	7	75	57	.5	.9	1.2	.7	
12	16	11	100	1.6	7.4	.8	1.4	3	23	100	4.6	13.9	2.3	3.3	6	46	100	.3	2.6	3.3	.6	
13	6		100		4.6	-1	.5	18	17	100	3.5	11.5	.8	3.7	3	43	100	1.3	3.0	1.6	1.1	
14	19		100		1.7	-1	.2	4	100				3.0	.1	4	26	100	2.9	2.1	4.8	2.9	
15	23		100		1.1	-1	.2	10		100		3.7		1.2	1	12	100	.2	1.0	.3	.4	
16	2	15	46		5.7	1.1	2.1	22	25	19	.5	1.1	1.6	2.1	5	5	100	.3	2.2	.2	.9	
17	5	6	13	1.6	2.3	.5	4.9	1	8	23	.5	.5	1.0	.7	18	7	100	.3	4.5	.2	2.6	
18	12	11				.9	1.4	19	7	2	1.0	.2	4.8	.4	13	13	9	.5	.6	.3	4.1	
19	9	4	6		2.9	.3	12.3	5		2	.5	.9	-1	14.7	17	3	8	.7	.4	.2	2.9	
20	4		15		2.3	-1	3.2	8		2		.2		3.6	10	3	3		-1	-1	1.8	
21	13	3	3	1.6	1.1	.2	10.3	15	1	1	1.0	.2	.1	10.6	23	4	1	.7	-1	.1	14.8	
22	14					-1	3.6	16						3.0	21	6		.2		.1	3.4	
23	3				1.1	-1	51.8	23	1	1	1.0	.5	-1	44.3	16	-1	-1	.7	.2	-1	53.5	

8.0% of 1942 Cohort has felony contacts
13.0% of 1942 Cohort has Part I contacts

72.5% of 1942 Cohort felons in pure types
(everyone in cluster has at least one felony contact)

70.6% of 1942 Cohort Part I offenders in pure types

9.2% of 1949 Cohort has felony contacts
16.9% of 1949 Cohort has Part I contacts

56.7% of 1949 Cohort felons in pure types
(everyone in cluster has at least one felony contact)

86.3% of 1949 Cohort Part I offenders in pure types

14.1% of 1955 Cohort has felony contacts
18.7% of 1955 Cohort has Part I contacts

60.7% of 1955 Cohort felons in pure types
(everyone in cluster has at least one felony contact)

84.3% of 1955 Cohort Part I offenders in pure types

These serious offenders also accounted for 81.3% of the burglaries and 75.0% of the robberies.

The next step was to develop juvenile and adult typologies which might enable us to increase our predictive efficiency over that obtained with simple scoring systems. Among these attempts were typologies based on number systems which not only took into account offense seriousness, referrals, and sanctions, but also the relative frequency of events. None, however, produced juvenile/adult correlations exceeding those obtained with various offense seriousness scores.

Although a variety of other typologies (offense typologies and sanctions typologies) enabled us to place cohort members in meaningful career types, none permitted an improvement in prediction of adult careers from juvenile careers beyond that obtained with simpler measures. Tables 1 and 2 in Chapter 2 presented the 1955 Cohort members according to their juvenile vs. adult typologies as examples. Some of the rather simple typologies which arranged cohort members according to their most frequent offenses or most serious offenses revealed that there was considerable heterogeneity within types and that a large proportion of those who fell into the more serious types had police contacts for drug offenses. This is a finding to which we returned from time to time with the suggestion that the role of drugs within serious offender types might be the cement that linked elements of continuing careers, or might be the element that increased severity of sanctions.

Our most sophisticated strategy was to conduct a canonical analysis of the major measures and typologies to see which juvenile combinations of measures and typologies best accounted for which adult combinations. In other words, how is juvenile delinquency best linked to adult crime and by which variables in each group?

When an analysis of measures of offense seriousness, severity of sanctions, computer-generated ranking systems, and computer-generated typologies was completed (probably the most expensive set of computer analyses that we have conducted), the maximum amount of the relationship between the juvenile and adult periods was accounted for when each period was represented by the number and seriousness of police contacts and the total severity of court sanctions. Little improvement in predictability was obtained when selected interview variables were added to the canonical analysis. Looking back, as we have continued to do so often, our earlier research clearly showed

that the interview variables had different patterns of relationship to different measures of delinquency and crime depending on sex, race/ethnicity, and neighborhood of socialization so that in all probability the interview effects were cancelled out in these uncontrolled analyses. Rather than saying, "so much for that," we point again to the complexity of the enterprise and the importance of analysis and reanalysis.

Even though the various typologies did not permit an increase in predictive efficiency between the juvenile and adult periods, they were elegant descriptive devices that could represent careers. We could say, for example, that 53% of the 1955 Cohort's juvenile all-around street offenders would, as adults, be in types ranging from all-around street offenders whose most serious offense would be armed robbery to lesser all-around street offenders whose most serious offense would be burglary. And, of those who were in these categories as adults, only 42% had been there as juveniles. While the prediction project had produced no improvement in predictive efficiency, it had set the stage for an investigation of how the content of some types might be the cement for important linkages or the catalyst for continuity in dissimilar careers.

Adding A Persistence Dimension to Self-Report and Official Typologies

In the typologies which we developed, frequency and seriousness of offenses have always been included in one way or another. Some of the computer-generated typologies have also included frequency of police referrals and severity of court sanctions. Most typologies or career measures have been separately constructed for the juvenile period and for the adult period because our goal was to construct typologies and measures for the juvenile period as predictors of typology or measure scores for the adult period. In no case did we insert a measure of persistence or within-period continuity, although our earlier research had indicated that seriousness and continuity were related during the juvenile and adult periods. We have also constructed tables which indicate that continuity during the juvenile period is correlated with continuity during the adult period.

Tables showing rates of continuation or discontinuation of offenses by contact order from the first to the 10th contact revealed that most juveniles desisted from most types of offenses after relatively few police contacts, roughly 75% of the males who had had non-traffic contacts by the 6th or 7th police contact, including those contacts which were only juvenile status

contacts or contacts for suspicion, investigation, or information. This does not tell us the age by which most desistance has taken place (we know that most careers peak at 16 or 17 and that desistance is rapid thereafter) nor does it tell us if police contacts are continuous or discontinuous. We do know that there are race/ethnic, sex, and offense category differences in rates of continuation and discontinuation, however. The entire matter, including the possibility (which turned out not to be a probability) of increasing seriousness with age was dealt with in *Assessing the Relationship of Adult Criminal Careers to Juvenile Careers* (Shannon, 1982).

More pertinent, however, was our finding that there were a variety of patterns of continuity and discontinuity if three age periods were considered, 6-17, 18-20, and 21 and older. When single years were utilized as the unit there were more than a dozen distinct patterns (and many more sub-patterns) of continuity or persistence. These and other findings to which we have referred in this chapter were most recently summarized in Chapters 10 and 11 of *Criminal Career Continuity* (Shannon, 1988).

To continue the point that patterns of continuity or persistence are a variable that should be considered for inclusion in typology development, we shall refer to several tables which were included in Chapter 9 of *Assessing*; that for the 1949 Cohort was also included in Chapter 10 of *Criminal Career Continuity*. In this table there were five continuity types before age 18. Within the continuous career type there were only 172 of 1,297 cohort members, i.e., 13.3%. Of these, 87 were socialized in the inner city or interstitial neighborhoods and among them 33.3% had very serious adult careers. In this serious group, 69% had felony offenses as adults. No other type had such a high indication of career seriousness. We were not at that time thinking in terms of typology development but it becomes obvious that offense seriousness, frequency, and persistence should be considered as elements for offender typologies.

Persistence in the 1955 Cohort

The importance of persistence as a dimension of delinquent type is the point that Elliott, Dumford, and Huizinga were making in their chapter in Burchard and Burchard's (1987) *Prevention of Delinquent Behavior*. Although there are some problems in their descriptions of Patterned Offender Classification (page 99), we believed that it would be illustrative if we commenced by substituting our official police contact data for self-report

data for ages 13-17 for the juvenile period and 18-22 for the adult period, these data to be utilized in placing everyone in the 1955 Cohort in Elliott, *et al.*'s Career Offender Classification. This is, of course, still only a heuristic exercise because there are dissimilarities in the design of the Racine study and the National Youth Survey. The National Youth Survey commenced in 1977 and consisted of 2,360 youth age 11-17 at the time of the first five interviews. There were 1,389 persons in their validation sample; our 1955 Cohort consisted of 2,685 persons with continuous residence in Racine (expanded for drug analysis) and for whom we had official data for the period 6-22. We are using the five ages, 13-17, in this methodological comparison.

Let us take, for example, the age of 17 for the Patterned Offender Classification, as shown in Table 2. The definitions of the categories of the classification following the approach of Elliott, *et al.*, are shown in regular type and the modifications to permit inclusion of all 1955 Cohort members are shown in boldface. Note that those who were missed with the first set of definitions (68) amounted to 62% of the 1955 Cohort members who were in the three offender classifications, all of whom had one or two felony-level offenses.

Tables were generated for every year, ages 13 through 21. Following the rule set up by Elliott, *et al.* the Patterned Offender Classification was utilized in classifying cohort members. Persons classified as Serious Patterned Offenders for two or more consecutive years become **Serious Career Offenders**. The **Nonserious Career Offenders** consisted of any pattern of offender types classified as Nonserious Patterned Offenders for two or more consecutive years, excluding those who were Patterned Serious Offenders for two or more years and had been classified as **Serious Career Offenders**. The **Noncareer Offenders** consisted of any pattern of offender types excluding those who had been placed in one of the career offender types or the Nonoffender type. The Nonoffenders were those in the Nonoffender classification ages 13-17 as juveniles, i.e., all five years.

The distribution of Career Offender Types is shown in Table 3 for the juvenile and adult periods. The rather low proportion of cohort members in the career offender types suggested, as we have said before, that the chance of having police contacts for all of one's offenses is small and therefore in any given year the record may not be very indicative of a juvenile's total miscreant behavior. In addition to running our data following Elliott's

TABLE 2. PATTERNED OFFENDER CLASSIFICATIONS: POLICE CONTACT DATA FOR THE 1955 COHORT AT AGE 17

Number of Police Contacts	Number of Index Offenses							Total
	0	1	2	4	5	7		
0	2212							2212
1	253	26						379
2	55	20	2					77
3	29	9	7					45
4	9	4	2	1				16
5	6	4		1				11
6	3	1	1					5
7	1	1						2
8	2		3					2
9		1			1			2
11	1		1	4				2
15						1		1
16	1	1				1		3
17					1			1
Total	2572	67	13	2	2	2		2658

Career Offender Classification

- (1) Nonoffenders - 0-3 contacts and no Index offenses
- (2) Exploratory Offenders - 4-11 contacts and no more than 1 Index offense or 1-3 contacts and 1 Index offense
- (3) Nonserious Patterned Offenders - 12 or + contacts and no more than 2 Index offenses; 2-11 contacts and 2 Index offenses
- (4) Serious Patterned Offenders - 3 or more Index offenses

TABLE 3. CAREER OFFENDER CLASSIFICATION: NATIONAL YOUTH SURVEY AND 1955 RACINE COHORT

	National Youth Survey (Self-Report Measures)	Racine Official Records for 1955 Cohort			
		Elliott Classification		Modified Classification	
		J	A	J	A
	
Serious Career Offenders	2.5%	.6%	.1%	.7%	.1%
Nonserious Career Offenders	7.5%	.2%	.1%	.5%	.1%
Noncareer Offenders	40.4%	13.0%	7.5%	12.6%	7.5%
Nonoffenders	<u>49.5%</u> 99.9%	<u>86.2%</u> 100.0%	<u>92.3%</u> 100.0%	<u>86.2%</u> 100.0%	<u>92.3%</u> 100.0%

procedure, we changed the rules, classifying anyone who had two out of five years as a Serious Patterned Offender as a Serious Career Offender. The Non-Serious Career Offender was defined as anyone who was a Nonserious Patterned Offender two out of five years, except for those who were already classified as Serious Career Offenders. Noncareer Offenders were all others except those classified as Nonoffenders all five years. The latter were Nonoffender types. Table 3 also reveals that when we compare the results obtained by using Elliott's definition with our broader definition the number of Serious and Nonserious Career Offenders is only slightly increased. Which is the better of two definitions depends on what one is doing with them.

The juvenile vs. adult tables generated by the two definitions are presented in Tables 4A and 4B. However, one need only glance at the tables to see that there are so few adult career offenders that the best prediction in either case is that no one will be an adult career offender. That juvenile career offenders produce disproportionately more adult offenders than do juvenile non-career or non-offenders does not counterbalance the fact that most adult career offenders are produced by juvenile non-career offenders. Almost as many adult offenders are produced by juvenile non-offenders. The problem here was that both definitions of continuity were so stringent that they generated very few career offenders, too few continuers to present much possibility of improvement in predictive efficiency over the modal category of the marginals.

Persistence in the 1942 and 1949 Cohorts

Although we do not have self-report data for the 1955 Cohort, we do have both official and self-report data for the 1942 and 1949 Cohorts. The first step was to determine if Elliott, *et al.*'s scheme could be utilized with the Racine data. An exact replication is not possible because responses were by frequency categories 0) Never, 1) Once or twice, 2) Occasionally, 3) Frequently, and 4) All of the time and referred to four age periods (6-13, 14-17, 18-20, and 21+) rather than years of age. In order to quantify the frequency categories, they were scored from one to four, and summed for the 16 offense categories from our self-report which matched categories used by Elliott, *et al.* The highest possible frequency score was 64 for any age period.

The seriousness measure utilizing index offenses was simply the frequency score for seven different index offenses. Thus, what we have is a seriousness

TABLE 4A. JUVENILE VS. ADULT CAREER CLASSIFICATION BASED ON OFFICIAL DATA:
ELLIOTT, ET AL., MODEL: 1955 COHORT

		<u>A d u l t</u>				
<u>J u v e n i l e</u>	Nonoffenders	Noncareer Offenders	Nonserious Career Offenders	Serious Career Offenders	Total	%
Serious Career Offenders	3	12		1	16	.6
Nonserious Career Offenders	3	3			6	.2
Noncareer Offenders	236	105	2	2	345	13.0
Nonoffenders	2211	80			2291	86.2
Total	2453	200	2	3	2658	100.0
%	92.3	7.5	.1	.1	100.0	

TABLE 4B. JUVENILE VS. ADULT CAREER CLASSIFICATION: MODIFIED MODEL: 1955 COHORT

		<u>A d u l t</u>				
<u>J u v e n i l e</u>	Nonoffenders	Noncareer Offenders	Nonserious Career Offenders	Serious Career Offenders	Total	%
Serious Career Offenders	3	14		2	19	.7
Nonserious Career Offenders	4	9			13	.5
Noncareer Offenders	235	95	3	2	335	12.6
Nonoffenders	2211	80			2291	86.2
Total	2453	198	3	4	2658	100.0
%	92.3	7.5	.1	.1	100.0	

self-report score based on index offenses that could have as its maximum a score of 28 for any age period.

These measures, one for frequency and one for seriousness did not match Elliott, *et al.*, but served the purpose of producing a self-report Patterned Offender Classification for each age period (14-17 shown in Table 5) and then the Career Offender Classification shown in Table 6. The cutting points differed from those utilized by Elliott, *et al.*, but followed the same general pattern that we used in Table 1 for official data. Each age period was checked to assure that cutting points resulted in a fairly comparable array of offender types.

Since the Racine self-reports were not age by age but by age periods, the rules utilized by Elliott, *et al.*, were modified so that Serious Career Offenders were those who were Serious Patterned Offenders during both age periods in the juvenile period and then for the adult classification, serious offenders during both periods of the adult period. Nonserious Career Offenders were those who were Nonserious Patterned Offenders both age periods in the juvenile and adult periods, whichever period was under consideration. Nonserious Offenders were those who had other patterns but were not Nonoffenders during both periods. The latter were Nonoffenders.

The above approach produced 4.2% Serious Career Offenders during the juvenile period and 9.0% during the adult period but so few (3 as juveniles and none as adults) Nonserious Career Offenders that they were collapsed with the Serious Career Offenders.

Serious Career Offenders as juveniles were as likely as not to be classified as Serious Career Offenders as adults, Noncareer Offenders were slightly more likely to be in the same category or a more serious category, and Nonoffenders were most likely to continue to be Nonoffenders. All of this suggested, as have our previous typologies, that juvenile nonserious offender categories were not likely to become serious offenders as adults but that many do have adult offenses and that even though serious juvenile offender types are more likely to become adult offenders than are others, desistance is high.

Elliott, *et al.*, validated, so to speak, their career offender types by comparing the mean distribution of demographic variables and some other measures of delinquency. In the Racine case, as one proceeds from the Nonoffender to the Serious Career Offender, the juveniles become slightly more Non-white, considerably more male, and had almost 20 times higher juvenile

TABLE 5. SELF-REPORT OFFENSE CLASSIFICATIONS: AGE PERIOD 14-17 FOR 1942-1949 COHORTS

Self-Report Frequency Score	Index Self-Report Offense Score								
	0	1	2	3	4	5	6	7+	Total
0	227								227
1	78	22							100
2	76	21	6						103
3	44	24	10	5					83
4	36	23	10	3					72
5	21	19	11	4					55
6	7	11	18	4	1				41
7	9	9	7	4	4				33
8	7	10	10	4	4				35
9	4	4	4	12	1	3			28
10+	5	13	12	19	14	11	13	25	112
Total	514	156	88	55	24	14	13	35	889

Career Offender Classifications

- (1) Nonoffenders - 0-4 Frequency Score and no Index score
- (2) Nonpatterned Offenders - 5-9 Frequency Score and no Index Score or 1-9 Frequency Score and Index Score of 1 or 2
- (3) Nonserious Patterned Offenders - 10 or + Frequency Score and any Index score or 3 or + Frequency score and 3-6 Index Score
- (4) Serious Patterned Offenders - 7 or + Index offenses

TABLE 6. JUVENILE VS. ADULT CAREER CLASSIFICATION BASED ON SELF-REPORT DATA:
1942-1949 COHORTS

<u>Juvenile</u>	<u>Adult Career Offender Classification</u>			Total	%
	Nonoffenders	Noncareer Offenders	Serious Career Offenders		
Serious Career Offenders	2	16	19	37	4.2
Noncareer Offenders	229	225	55	509	57.2
Nonoffenders	271	66	6	343	38.6
Total	502	307	80	889	100.0
%	56.5	34.5	9.0	100.0	

Serious Career Offenders: Serious patterned offenders during both juvenile or both adult age periods

Noncareer Offenders: All other offender patterns except nonoffender during both juvenile or both adult age periods

Nonoffenders: Nonoffenders during both juvenile or both adult age periods

Comparison of Career Offender Classification

	Nonof	Noncar	Sercar
JUVENILE			
Race (White-Non-White)	.842	.861	.966
Sex	.283	.603	.931
Juvenile Offense Seriousness Score	.694	.841	11.241
Adult Offense Seriousness Score	3.531	6.495	8.379
N	343	517	29
ADULT			
Race (White-Non-White)	.857	.862	.818
Sex	.325	.689	.879
Juvenile Offense Seriousness Score	2.080	5.282	15.030
Adult Offense Seriousness Score	3.771	6.559	18.091
N	502	354	33

offense seriousness scores. Those who were in the juvenile career types also markedly increased their adult seriousness scores but not to the extent that juvenile seriousness scores increased. Although there was no progression to Non-whiteness, the adult offender types did progress to maleness, increased seven times in what their juvenile seriousness scores had been and almost five times in their adult offense seriousness scores. There was, of course, only a modest relationship between juvenile and adult career offender classifications for the 1942 and 1949 Cohorts.

While the Elliott, *et al.* typology provided an interesting exercise that utilized the data in a different fashion than had we, we concluded that this continuity model did point toward a new typology with improved predictability over that obtained with previous efforts. All things considered, the offense typology based on most serious to least serious types of offenses which was presented as early as Chapter 2 or a typology based on frequency (0, 1-4, and 5+ police contacts) and seriousness of offenses (felony vs. non-felony) and dichotomized as juvenile and adult will serve our purpose, the description of careers and prediction from juvenile to adult, better than a simple frequency vs. Part I by continuity typology. At the same time, we believe that this approach has merit as a heuristic device for preliminary examination of the nature of careers.

Chapter 8

LINKING SOCIAL PROCESSES TO PREDICTION: ADDITIONAL CONSIDERATIONS IN THE DEVELOPMENT OF A PREDICTION DEVICE

Introduction

In earlier chapters we have summarized years of research on the use of cumulative delinquent events, their frequency, and seriousness, and actions of the justice system stemming from these events in an effort to predict various dimensions of adult criminal careers. We have also shown how independent variable background factors, experiences, and attitudes have different patterns of effects depending on the race, sex, and nature of one's place of socialization, i.e., type of neighborhood, dichotomized into inner city vs. other types of neighborhoods.

In the course of this research it became apparent, as it had earlier been shown by age categories, i.e., juvenile vs. adult, that the process of sanctioning had as one of its effects, particularly for males, the production of even more serious offenders in following age periods, particularly in the inner city with its high DCP (delinquency and crime producing characteristics) and traditionally high delinquency and crime rates. Path analysis had shown that even the most charitable evaluation of the operation of the justice system would conclude that serious juvenile misbehavior was not reduced by sanctions as meted out by the justice system. These earlier findings were reinforced by examination of what went on inside neighborhoods and groups of neighborhoods.

Since the units of time were juvenile vs. adult and results were based on combining contact, referral, and sanctions for broad periods, these conclusions could not be defended as well as if they had rested on specific events of juvenile misbehavior or adult crime and their consequences in the justice systems.

A More Precise Evaluation of the Effects of Sanctions

After a laborious recoding and multiple regression analysis with sex, demographic, and experience variables including behavior and justice system responses to behavior (seriousness of each police contact, type of juvenile neighborhood, sex, race, age at each police contact, severity of prior sanctions, total prior sanctions, number of prior sanctions, and severity of present sanction), it was determined that future juvenile offense seriousness for the combined cohorts could best be predicted at the fifth or sixth contact but that only about 38% of the variance was accounted for. The first adult

contact, which would be relatively early chronologically in the adult period, provided the best prediction of future adult behavior but only 28% of the variance was accounted for (A More Precise Evaluation of the Effects of Sanctions, Shannon, 1985a). When juveniles and adults were combined, the best prediction could be made after the eighth or ninth contact when 40% of the variance was accounted for. There were, of course, some cohort differences but that is not of concern at this point.

According to the multiple regression analysis, age at contact and race contribute the most to explaining the variances in future total offense seriousness first through the tenth contact. Race (Non-White) is positively correlated with future offense seriousness and age is negatively correlated with future offense seriousness.

When the effects of age at contact (which represents more years at risk for future trouble as well as early identification) and race (which represents status and life experiences rather than predisposition to delinquency and crime) were removed from the multiple regression analysis, *total prior seriousness* and *number of prior sanctions* became the most important variables accounting for the variation in *future total offense seriousness*. What is particularly interesting about this is that while number of prior sanctions is an important effect, total prior severity of sanctioning is not.

In Table 19 (Shannon, 1985a) (multiple regression analysis) the effect of total prior severity of sanctioning on future offense seriousness was one of the weakest effects and was never significant. This was still the case when age and race were eliminated from the analyses. On the other hand, number of prior sanctions had either the most important or the second most important effect when age and race were eliminated from the set of independent variables. This finding, along with later analysis (Tables 28-33 of Shannon, 1985a) indicating that increasing severity of sanction does not result in desistance or lower future offense seriousness, suggests that frequent intervention of less severe nature may be more effective than sporadic or infrequent severe sanctions. This leads to the question of whether, in fact, a high number of prior sanctions actually produces a low future offense seriousness or if what we perceive is actually due to the interplay of these two variables with other variables such as age at contact, race, or total prior seriousness. What we are saying is that we are dealing with a complex social process rather than a simple cause and effect type of phenomenon like tightening the noose to choke off crime.

Inasmuch as Lisrel analysis was all the rage at the time (sociologists and anthropologists have generated a sizeable literature on fads, fashions, and rages over the years) but perhaps not recognized as such by its advocates and practitioners as much as did those whom they tormented into learning "the key to the new Jerusalem." Accordingly, we did include an appendix by Kathleen Anderson with the assistance of W. Edgar Murph and Professor Robert Nash Parker. Police contacts three through eight were utilized to reveal, perhaps more clearly and more surely, that the effects of independent processual (experiences and behaviors) and demographic variables differed as the analysis progressed and were in general different for the juvenile and adult careers.

Another question, always considered in career research, has been whether or not a career will continue or discontinue after a given contact. Multiple discriminant analysis was utilized to investigate this phenomenon. The various experiential and demographic variables, first through ninth contact, had little effect; age of contact was clearly the best discriminating factor, such discriminators as total prior seriousness and number and severity of prior sanctions becoming important only after the fourth, fifth, or sixth contact but they did not have sufficient consistency beyond the fifth or sixth contact to have predictive value for persons in decision-making positions.

The association between a large number of prior sanctions and a low future offense seriousness may also be a function of the relationship of age at contact to each of the other two variables. An older age at contact may have had as its antecedent a large number of prior sanctions and be followed by a low future total offense seriousness. (The cohort member had a shorter time to acquire future contacts and thus future seriousness.) Thus what we perceive as a relationship between numerous prior sanctions and low future offense seriousness may only be a reflection of the age at contact, particularly age at first contact interrelationships. Controlling for an additional variable such as race may further augment or diminish the relationship.

As another possibility, the association between a large number of prior sanctions and a low future offense seriousness may be due to the relationship of total prior seriousness to each of the other two variables. Total prior seriousness is positively correlated with both number of prior sanctions and future total offense seriousness. That is, a high total prior seriousness is linked with a large number of prior sanctions and a high future offense seriousness.

Since there has always been severe criticism of analyses in which all police contacts were included, we also conducted a number of analyses in which traffic contacts were excluded and in which every cohort member was placed in one of 10 different seriousness and severity of sanctions categories for each two-year period commencing at ages 15-16, and proceeding in two-year intervals to 21-22, these categories ranging from persons with no police contacts during that period to those with felonies which culminated in institutionalization. This resulted in the conclusion that the more severely juveniles were sanctioned or the more severely young adults were sanctioned, the more serious was their misbehavior in the following two years, even suggesting that institutionalization in the earliest years had more deleterious effects and was slower to wear off than did institutionalization during later years.

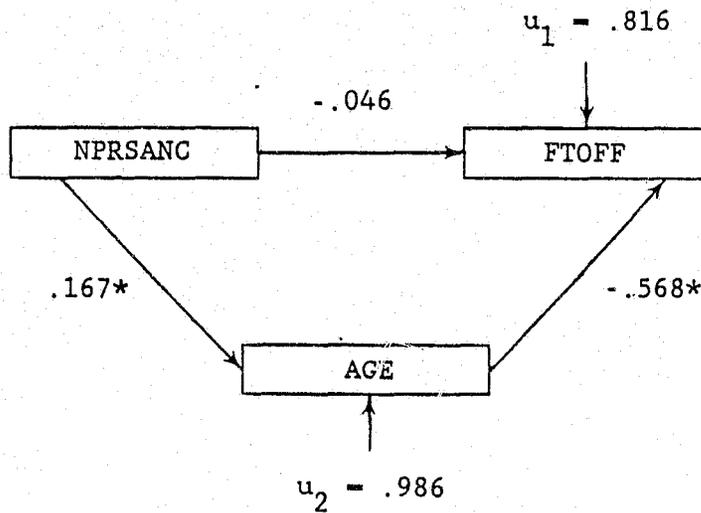
Turning to Path Analyses to Better Understand Process

Path analysis enables us to see, for example, if there are intervening or mediating effects via such variables as age at contact, race, or total prior seriousness that affect the relationship between number of prior sanctions and future total offense seriousness. Although an appendix was attached to our report, A More Precise Evaluation of the Effects of Sanctions (Shannon, 1985a), in which path analysis was used to add to our understanding of how future offense seriousness could be better seen as a complex processual phenomenon, they were limited to three or four variables. The presentation which follows becomes decidedly more complex. The analysis was conducted by and the first version of the findings was written by Kathleen Anderson.

Models were constructed to examine the interaction of these effects at the sixth contact level. The sixth contact level was chosen because it represents a more advanced stage of career and thus it is easier to see the effects of the cumulative career variables of interest.

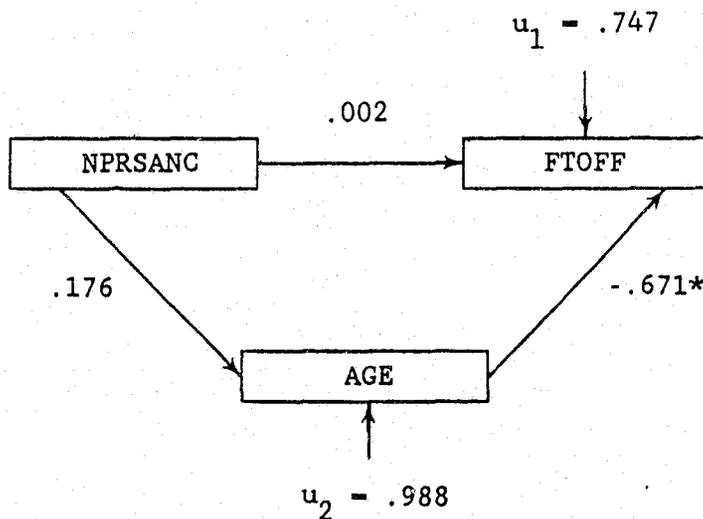
The relationship between number of prior sanctions (NPRSANG) and future offense seriousness (FTOFF) is mediated by the effects of age at contact (Diagram 1). Number of prior sanctions appears to have an indirect effect on future offense seriousness through age at contact. It is important from the standpoints of understanding the process of becoming delinquent and actively assessing intervention strategies to appreciate the fact that there is relatively little direct causal effect. The direct effect of age at contact on future offense seriousness is much greater than the direct effect of number of prior sanctions on future seriousness. Age and number of prior sanctions explain 33.2% of the variation in future offense seriousness. Age alone

DIAGRAM 1. THE EFFECTS OF AGE AT CONTACT AND NUMBER OF PRIOR SANCTIONS ON FUTURE OFFENSE SERIOUSNESS



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

DIAGRAM 2. THE EFFECTS OF AGE AT CONTACT AND NUMBER OF PRIOR SANCTIONS ON FUTURE OFFENSE SERIOUSNESS: NON-WHITES



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

accounts for 32.3% of the variation in future offense seriousness, while number of prior sanctions alone accounts for only 2.0%.

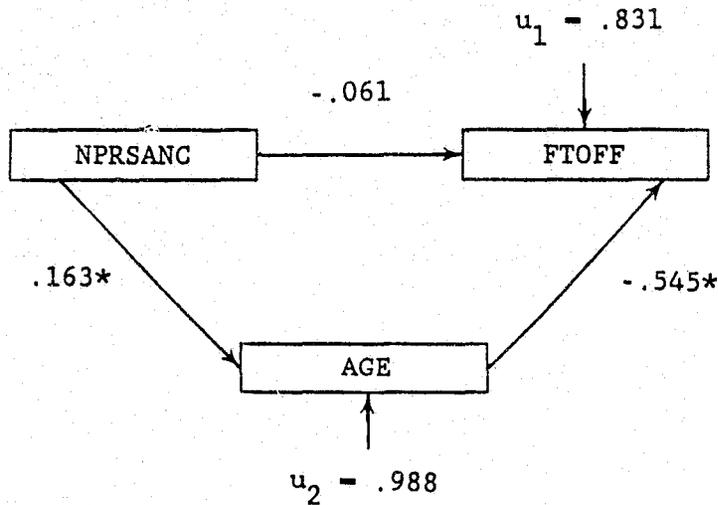
Another interpretation of the relationship between number of prior sanctions, age at contact, and future offense seriousness is that the other two variables are a function of age at contact and thus the apparent relationship between number of prior sanctions and future seriousness is spurious. In other words, a low number of prior sanctions is associated with a high future offense seriousness because an early age at contact almost assures a low number of prior sanctions and a high future offense seriousness. Although age at contact alone explains around 33% of the variation in future offense seriousness, it accounts for only about 3% of the variation in number of prior sanctions. Thus, a causal relationship between number of prior sanctions and future offense seriousness does exist but it is primarily a function of the indirect effects of number of prior sanctions through age at the sixth contact. Age at sixth contact is a mediating variable.

The second most powerful variable in its effect on future offense seriousness is race. When a control for race is incorporated in the model we see that more of the variation in future offense seriousness is accounted for by age at contact and number of prior sanctions for Non-Whites than for Whites. For the Non-Whites the relationship between number of prior sanctions and future offense seriousness is almost entirely due to the indirect effects of a number of prior sanctions through age at contact (Diagram 2). The direct effect of age at contact on future offense seriousness is much, much greater than the direct effect of number of prior sanctions (an effect which is practically nil). Controlling for age at contact makes the original relationships between number of prior sanctions and future offense seriousness all but disappear.

For the Whites (Diagram 3) the direct effect of age at contact is also much greater than the direct effect of number of prior sanctions on future offense seriousness. Again the relationship between number of prior sanctions and future career is primarily due to the indirect effects of number of prior sanctions through age at contact.

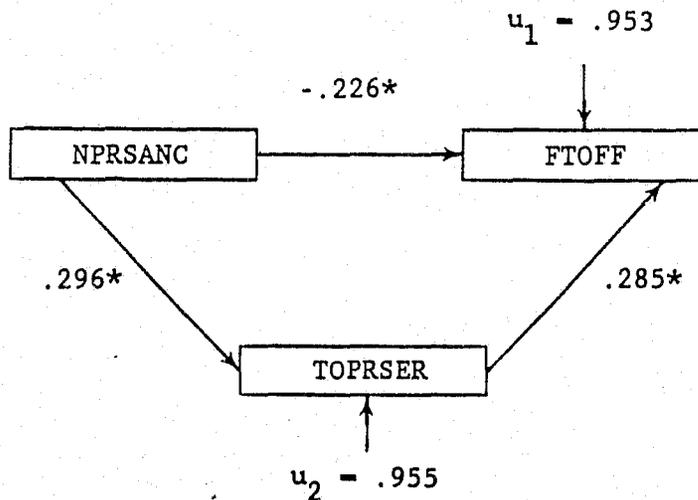
Controlling for race did not significantly alter the relationship found between number of prior sanctions and future offense seriousness or age at contact and future offense seriousness. Even with controls for race, the same conclusion can be drawn. That is, the relationship between a high number of

DIAGRAM 3. THE EFFECTS OF AGE AT CONTACT AND NUMBER OF PRIOR SANCTIONS ON FUTURE OFFENSE SERIOUSNESS; WHITES



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

DIAGRAM 4. THE EFFECTS OF NUMBER OF PRIOR SANCTIONS AND TOTAL PRIOR SERIOUSNESS ON FUTURE OFFENSE SERIOUSNESS



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

prior sanctions and a low future seriousness is due to the indirect effects of number of prior sanctions through age at contact.

As another possibility, number of prior sanctions may be an indirect cause (causality in the weak sense) of future total offense seriousness through total prior seriousness (TOPRSER). That is, the effect of number of prior sanctions on future offense seriousness can be interpreted in terms of the effect of total prior seriousness (Diagram 4). A low total prior seriousness is associated with both a low number of prior sanctions and a low future offense seriousness. A low number of prior sanctions is associated with a high future seriousness. Total prior seriousness and number of prior sanctions have effects on future seriousness that tend to cancel each other out. Without a control for total prior seriousness, we see less of a relationship between number of prior sanctions and future seriousness than actually exists. With a control for total prior seriousness the strength of the relationship found between number of prior sanctions and future seriousness is augmented. Total prior seriousness acts as a suppressor variable.

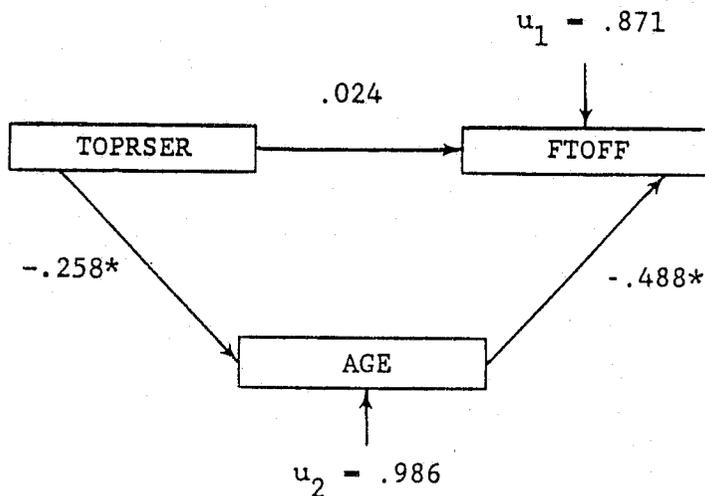
While the relationship between number of prior sanctions and future offense seriousness is not spurious, the results of the analyses do not provide support for the assumption that a high number of prior sanctions directly produces low future offense seriousness. Instead, the relationship found appears to be due to the indirect effects of number of prior sanctions through age at contact.

Going a step further, when the relationship between total prior seriousness, age at contact, and future offense seriousness is explained within a causal path framework (Diagram 5), total prior seriousness is found to have an indirect effect through age at contact rather than a direct causal effect. Age at contact, the variable most highly correlated with total future offense seriousness is then at the heart of the relationship that is found between the measures of cumulative career and sanctioning and future offense seriousness.

The effect of the cumulative career variables on future seriousness can not be interpreted in terms of any indirect effects found by tracing a path from total prior seriousness or number of prior sanctions through the immediate measures of criminal career, seriousness of sixth offense (TYPESER) and severity of sanction (RECSNC) (Diagram 6).

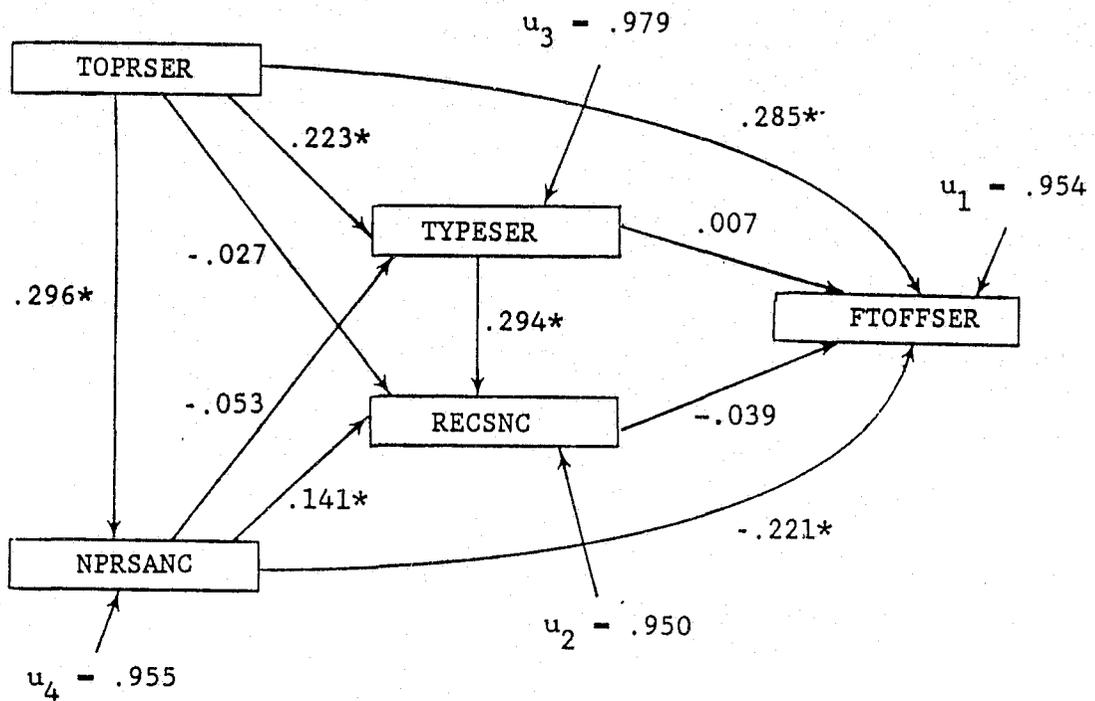
The early age at contact and high future total offense seriousness relationship appears to be fairly stable and one of the most consistent

DIAGRAM 5. THE EFFECTS OF TOTAL PRIOR SERIOUSNESS AND AGE AT CONTACT ON FUTURE OFFENSE SERIOUSNESS



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

DIAGRAM 6. THE EFFECTS OF THE CUMULATIVE AND IMMEDIATE MEASURES OF CAREER ON FUTURE OFFENSE SERIOUSNESS



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

CORRELATIONS BETWEEN THE MEASURES OF CUMULATIVE AND IMMEDIATE CAREER

	TOPRSER	NPRSANC	TYPESER	RECSNC	FTOFFSER
TOPRSER	1.000	.296	.207	.075	.218
NPRSANC		1.000	.013	.136	-.141
TYPESER			1.000	.290	.052
RECSNC				1.000	-.045
FTOFFSER					1.000

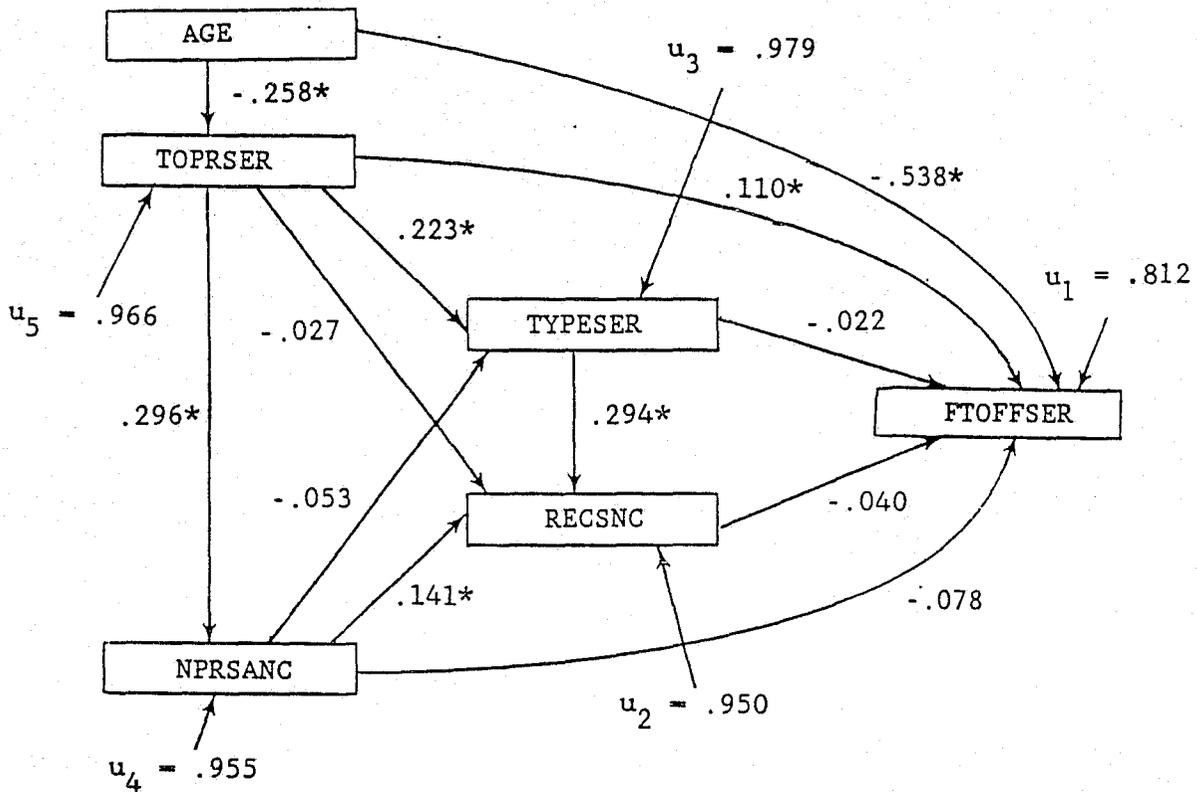
findings of the analysis. The most obvious explanation of the observed relationship is that those cohort members with an early age at contact, at any given contact level, have more time for future criminal activity and thus have a greater chance to develop high future offense seriousness. Another possible explanation for the perceived relationship is that the evolution of a pattern of criminal career-sanctioning acts as a mediating factor within the age-future seriousness relationship. For example, a high total prior seriousness is associated with an early age at contact. One popular hypothesis is that having a high total prior seriousness at an early age for any given contact level is indicative of the "type" of person that one is. Thus, an early serious and/or frequent offender is by nature likely to have a serious future career as manifested in a high future offense seriousness. If the career effects, immediate and cumulative, do provide an interpretation or explanation of the relationship between age at contact and future offense seriousness, then the direct causal effects of age at contact on future seriousness should be dominated by the indirect effects of age at contact through one or more of the career variables.

The largest indirect effect is found by tracing a path from age at contact to total prior seriousness to future offense seriousness but it is very small (-.028 vs. -.538) relative to the direct effect of age at contact on future offense seriousness (Diagram 7). Thus, utilizing the criminal career variables in an attempt to interpret the effect of age at contact on future offense seriousness fails. Age at contact in fact has a direct causal effect on future offense seriousness that is not mediated by the effects of the career variables. This suggests that a simple interpretation of the relationship is the more valid. That is, persons with an early age at contact simply have more time for future criminal activity and thus a greater chance of a high future offense seriousness. The question that this also raises is why do some young people have earlier contacts with the police than do others, aside from the fact that they have engaged in misbehavior of a type that is visible in an area that is watched by its citizens and/or patrolled?

Conclusion

The effects of the two cumulative measures of career, number of prior sanctions and total prior seriousness, on future offense seriousness are mediated by the effect of age at contact. A high number of prior sanctions can not be said to produce a low future offense seriousness and a high total prior seriousness does not produce a high future offense seriousness. In the case of number of prior sanctions, a high number of prior sanctions is

DIAGRAM 7. THE EFFECTS OF AGE AT CONTACT AND THE CUMULATIVE AND IMMEDIATE MEASURES OF CAREER ON FUTURE OFFENSE SERIOUSNESS



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

CORRELATIONS BETWEEN THE MEASURES OF CUMULATIVE AND IMMEDIATE CAREER

	AGE	TOPRSER	NPRSANC	TYPESER	RECSNC	FTOFFSER
AGE	1.000	-.258	.167	-.120	-.007	-.576
TOPRSER		1.000	.296	.207	.075	.218
NPRSANC			1.000	.013	.136	-.141
TYPESER				1.000	.290	.052
RECSNC					1.000	-.045
FTOFFSER						1.000

associated with a later age at present contact which, in turn, is associated with a low future offense seriousness. A high total prior seriousness is associated with an early age at contact which, in turn, is associated with a high future offense seriousness. In both instances the indirect causal effects dominated the direct causal effects.

Controlling for the effects of the immediate measures of career, type seriousness of present contact and sanction just received, does not change the strength or nature of the relationship found between number of prior sanctions and future offense seriousness or between total prior seriousness and future offense seriousness. The direct effects are much greater than the indirect effects found by tracing a path from the cumulative measures of career through either type seriousness of present contact or sanction just received to future offense seriousness. Failure to control for total prior seriousness results in an attenuation of the relationship found between number of prior sanctions and future offense seriousness. Total prior seriousness functions as a suppressor variable.

Again, the most striking finding is the strength of the effect of age at contact on future offense seriousness. An examination of the indirect effects of age at contact through the career variables, number of prior sanctions, total prior seriousness, type seriousness of present contact, and severity of sanction just received, was not useful in interpreting the relationship between age at contact and future offense seriousness. This rules out one possible explanation for the relationship, that age at contact functions as a proxy variable for stage of criminal career development.

The likelihood of the more straight forward alternative explanation, that an early age at contact leaves more time for future criminal and delinquent behavior, being the more valid interpretation of the relationship, is enhanced. One could argue that early age of police contacts results in labeling (known to persons in the justice system) and these cohort members therefore not only have more time for future offenses but also a better chance of being recognized as troublesome.

While all of this may seem of little use to the practitioner other than to warn him/her to go very slowly in attaching great meaning to analyses which recommend that actions be taken because this or that uncontrolled effect has been found, it does set the stage for analyses which will go beyond those which we have thus far conducted.

If demographic and experiential effects, aside from age, are as shifting as we have found them to be, is it possible that we have failed to include the

most crucial variables or indicators of them? Even if they do not have direct effects, is it possible that involvement with alcohol and drugs to such an extent that police contacts ensue will influence career continuity? We shall turn to this in the next chapter.

Chapter 9

DEVELOPING A SYSTEM FOR ESTABLISHING THE ALCOHOL/DRUG AND DELINQUENCY/CRIME NEXUS

Introduction

Having considered the data at some length, we have come to the point that several alcohol/drug and delinquency/crime preliminary methodological analyses should be made with the 2,658 continuous residents (age 13-22) in the 1955 Cohort that had been augmented with those who had been continuous residents from age 13. These analyses should give us some idea of the number of persons in the cohort who had juvenile/adult continuity and who had alcohol/drug involvement and various combinations thereof. Some of the findings are now presented as a prelude to analyses of the updated 1955 Cohort (continuous residence to 1988 and augmented by those with continuous residence age 13-32).

Frequency Types and the Alcohol/Drug and Delinquency/Crime Nexus

Prior to the analyses which follow we had recoded all police contacts from the 1955 Cohort to determine if alcohol was involved in the behavior which resulted in a police contact. Drug involvement had been coded previously so that the drug recoding consisted of noting the exact drug(s) and what police considered to be "intent." The data on substance offenders was now expanded beyond those who had had police contacts for drugs and/or alcohol offenses and enabled us to control for drug use vs. production, transportation, and sales.

In our most frequently used typology there were several drug offender types and a liquor offender type. The other types, it will be remembered, ranged from murderers, all-around street offenders, and so on, to persons who had not had police contacts. Persons in many other offender types also had police contacts for drug and/or alcohol offenses and persons whose most serious offense was for drugs had many other lesser types of offenses.

The question was one of how to present the data to show the interrelationship of alcohol/drugs and delinquency/crime in a simpler fashion than had been done in Tables 1 and 2 of Chapter 2. Diagram 1A does this. We have placed traffic, suspicion, investigation, or information, and status offenses, unless drug or alcohol related, in the No Contact (offense) category in the table as a bookkeeping device; these contacts and the persons who had no contacts or only contacts of this type remain in the table with the 2,658 cohort members who had 9,150 police contacts but are shown separately in the upper left hand corner. The frequent offender (chronic), five or more police

DIAGRAM 1A. DISTRIBUTION OF 1955 COHORT BY JUVENILE/ADULT ALCOHOL/DRUG AND DELINQUENCY/STATUS ACCORDING TO OFFICIAL RECORDS

Offense Behavior Type JUVENILE (6-17)	Offense/Behavior Type ADULT (18 AND OLDER)									TOTAL
	No Contacts	1-4 Contacts				5 or More Contacts				
		No Alcohol/Drugs	Alcohol, No Drugs	Drugs, No Alcohol	Drugs & Alcohol	No Drugs/Alcohol	Alcohol+	Drugs+	Drugs Alcohol+	
2002	491	37	84	32	69	18	23	0	2756	
1750	176	16	26	4	6	2	2	0	1982	
1.1	2.8	2.3	3.2	8.0	11.5	9.0	11.5	---		
<u>1-4 Contacts, No Alcohol/Drugs</u>	924 288 3.2	671 101 6.6	103 10 10.3	122 18 6.8	20 3 6.7	157 11 14.3	13 1 13.1	59 5 11.8	36 2 18.0	2105 439
<u>1-4 Contacts, Alcohol, No Drugs</u>	147 46 3.2	89 15 5.9	13 2 6.5	16 3 5.3	0 0 ---	57 4 14.3	17 1 17.0	0 0 ---	0 0 ---	339 71
<u>1-4 Contacts, Drugs, No Alcohol</u>	62 18 3.4	40 8 5.0	33 3 11.0	8 1 8.0	0 0 ---	0 0 ---	0 0 ---	36 2 18.0	0 0 ---	179 32
<u>1-4 Contacts, Drugs & Alcohol</u>	7 2 3.5	25 2 12.5	0 0 ---	0 0 ---	0 0 ---	0 0 ---	0 0 ---	0 0 ---	0 0 ---	32 4
<u>5 or More Contacts, No Drugs/Alcohol</u>	385 23 16.7	446 21 21.2	61 3 20.3	0 0 ---	0 0 ---	505 13 38.8	181 5 36.2	325 9 36.1	148 3 49.3	2051 77
<u>5 or More Contacts, Alcohol +</u>	121 5 24.2	165 7 23.6	41 1 41.0	66 2 33.3	0 0 ---	320 8 40.0	170 5 34.0	82 2 41.0	56 1 56.0	1021 31
<u>5 or More Contacts, Drugs +</u>	61 2 30.5	85 4 21.3	11 1 11.0	19 1 19.0	0 0 ---	37 1 37.0	28 1 28.0	216 5 43.2	60 1 60.0	517 16
<u>5 or More Contacts, Drugs & Alcohol +</u>	23 2 11.5	14 1 14.0	0 0 ---	0 0 ---	0 0 ---	40 1 40.0	25 1 25.0	0 0 ---	48 1 48.0	150 6

contacts, is operationally defined as having a serious career. Note that of 2,658, 1955 Cohort members in what we now call the drug continuous residence group or drug cohort there were 1,750 who had either no police contacts or the types which we have just indicated as eliminated from the contact categories of the diagram. This left 908 cohort members in eight other offender types as juveniles or adults. They had had at least one police contact (offense) as a juvenile or as an adult and would be found in one of the 80 combinations of juvenile and adult careers shown in Table 1A. This set of categories was likely to produce some cells with no or very few cohort members.

The box in the lower right hand corner of Diagram 1A contains 57 cohort members who, as juveniles and adults, had five or more police contacts, i.e., serious offense careers, some of whom also had police contacts involving alcohol and/or drugs. In the cells of the types to the left and above there are people who have had serious involvement with the police as juveniles but not as adults or as adults but not as juveniles. The remaining cells of the table contain those who did not have serious involvement with the police as either juveniles or adults. Note that there are cells for those who had been involved in substance abuse, i.e., had police contacts for alcohol and/or drugs or both as juveniles and adults.

Each cell in Diagram 1A contains three figures, the number of police contacts, the number of cohort members who produced these contacts, and the mean number of contacts by cohort members in that cell. The upper left-hand corner cell contains 1,750 people with 2,002 contacts, and an average of 1.1 contacts per person. The lowest averages are generally in cells 1-5 in the upper left hand corner of the diagram and the highest are in cells 6-9 in the lower right hand corner, as would be expected. Since some cells contain very few cohort members, we must not become too entranced with these mean numbers of offenses per person, albeit the measures are rather consistent as we go from one section of the diagram to the other. For example, as one moves from the upper half of the diagram to the lower half of the diagram (6-9) the proportion who, as adults, have serious continuity increases.

Most of those in the No Contact category or with 1-4 police contacts, with or without alcohol or drug involvement in their records as juveniles had little or no adult involvement in crime. All but 4% of the 439 cohort members with 1-4 contacts but no juvenile alcohol and/or drug offenses desisted from serious careers as adults. The 107 with 1-4 contacts as juveniles and who had

alcohol and/or drug contacts also showed little continuity to serious adult careers (6.5%).

Those who were serious offenders as juveniles, i.e., five or more contacts, had 40% to 50% continuity as adults. The 77 serious offenders who had not had alcohol and/or drug contacts as juveniles showed greater continuity (40%) to serious adult careers than did groups that had not had serious juvenile careers. However, those serious offenders who were involved with alcohol and/or drugs had the greatest continuity (51.0%). Also note that the mean number of offenses per person is very high for each segment of that small group of 57 persons (only 2.1% of the cohort but with almost 25% of the cohort's police contacts) who had serious offense careers as both juveniles and adults, as would be expected.

Table 1B is presented as a collapsed version of 1A. Not only are the differences in continuity from juvenile to adult careers more clearly shown but it may also be seen how the average number of contacts per person among those 57 with serious career continuity far exceeds that of all others in the cohort. In essence, a disproportionate share of all of the 9,150 police contacts for the 1955 Cohort took place during the three-year period following age 18 for that 2.1% of the cohort with five or more police contacts before and after the age of 18. This will be given detailed consideration when we turn to Tables 2A, B, C, and D. It should also be noted that the 1.0% of the cohort (27 persons) who had police contacts with substance involvement and 5 or more police contacts before 18 and 5 or more police contacts after 18 was responsible for 11.8% of all police contacts by the entire 1955 Cohort. This is 39.7% of the 2,726 police contacts by persons who had 5 or more contacts after 18, a rather large share for only 1.0% of the cohort. The implications of this are another matter.

In spite of the concentration of police contacts among serious offenders which we and others have referred to for some years now, it must be recognized that police contacts are also widely dispersed throughout any cohort. In the case of the 1955 Cohort, that 1,750 (65.8% of the cohort) who had either no contacts or contacts which were removed from consideration because they were not offenses was responsible for 21.9% of all police contacts; others who had fewer than 5 police contacts as juveniles and adults (27.9%) were responsible for 32.5% of the police contacts. Those who had 5 or more police contacts as juveniles and adults but not both (4.1%) were responsible for 21.0% of the

DIAGRAM 1B. DISTRIBUTION OF 1955 COHORT BY JUVENILE/ADULT ALCOHOL/DRUG AND DELINQUENCY/STATUS ACCORDING TO OFFICIAL RECORDS

Offense Behavior Type JUVENILE (6-17)	Offense/Behavior Type ADULT (18 AND OLDER)					
	No Contacts	1-4 Contacts		5 or More Contacts		TOTAL
No Alcohol/Drugs		Alcohol and/or Drugs	No Drugs/ Alcohol	Alcohol and/or Drugs +		
<u>No Contacts</u>	2002	491	153	69	41	2756
	1750	176	46	6	4	1982
	1.1	2.8	3.3	11.5	10.3	5.5% SERIOUS CONTINUITY
<u>1-4 Contacts, No Alcohol/Drugs</u>	924	671	245	157	108	2105
	288	101	31	11	8	439
	3.2	6.6	7.9	14.3	13.5	4% SERIOUS CONTINUITY
<u>1-4 Contacts, Alcohol and/or Drugs</u>	216	154	127	57	53	550
	66	25	13	4	3	107
	3.3	6.2	9.8	14.3	17.7	6.5% SERIOUS CONTINUITY
<u>5 or More Contacts, No Drugs/Alcohol</u>	385	446	61	505	654	2051
	23	21	3	13	17	77
	16.7	21.2	20.3	38.8	38.5	40% SERIOUS CONTINUITY
<u>5 or More Contacts, Alcohol and/or Drugs</u>	205	264	137	397	685	1688
	9	12	5	10	17	53
	22.8	22.0	27.4	39.7	40.3	51% SERIOUS CONTINUITY

contacts and as previously stated, the 57 persons (2.1%) with 5 or more contacts as juveniles and adults had 24.5% of the total. Depending on how widely the net is to be cast, we are most concerned with 1.0%, 2.1%, or 6.2% of the cohort, the latter responsible for 45.5% of the cohort's police contacts.

We have also checked the records of each person who was deceased by 1988 or who had been institutionalized for one or more years to determine if either of these events could have accounted for their desistance from an adult career as of 1976. There were only 11 cohort members who had died, moved, or left the community for the armed forces so early (1973) that it would have prevented them from having a serious adult record. Of those, six were in the juvenile, no career or non-serious career categories where the probability for an adult career was small. Most of those who had been institutionalized had gone on to serious adult careers or had already had sufficient contact with the police to be in the adult serious offender group.

As the analyses progresses we shall also control for sex and type of neighborhood. Although recent studies of numerous metropolitan areas have shown that Black segregation is increasing, the augmented cohort does not have enough Blacks to conduct the kinds of analyses that we have set up. This is unfortunate because even though some Blacks have been able to move to almost every neighborhood, the Black density of the inner city has been increasing. Blacks are more and more isolated from the mainstream of life in even middle-sized cities. Thus Black and/or inner city become explanatory variables in a sociological sense rather than in a strictly demographic and ecological sense.

The Chain of Experiences in Drug Offender Careers

At this point we have listed and identified but not spooned out the 107 juvenile substance offenders who do not have serious records or the 53 juvenile serious offenders who had alcohol and/or drugs in their juvenile records to determine how their early careers differed in such a way as to permit prediction of which members of each group would desist or almost totally desist. All that we can now say is that continuity increases more if both alcohol and/or drugs are found in serious juvenile careers. We shall probably find that the nature of other offenses in these careers differs somewhat from the offenses in ordinary delinquent and criminal careers. What we shall probably discover is that the organization of delinquent and criminal

careers differs between those who are drug offenders and those whose organizing principle in life is something other than drugs. Sophisticated police already know this but have not quantified it as we shall do. Since careers are now set up in chronological order, we will be able to examine the incidents in them as elements of events in a chain of experiences.

While the brief description of offenses preceding and following drug offenses which follows is not our definitive statement on the issue of drugs/delinquency/crime and their chronological position in various types of delinquent and criminal careers, it is drawn from a rather lengthy analysis of the careers of the 1955 Cohort members up to the age of 21, the cut-off point for continuous residence members (2,149) for the 1955 Cohort in 1976. We have not yet conducted a similar analysis of offense types preceding and following police contacts for drugs among the 1441 drug cohort members of the 1955 Cohort.

The first police contact of their careers was for drugs among 16% (18% if contacts for suspicion, investigation, or information are excluded) of all cohort members. More than three-fourths of the remaining 84%'s first drug contacts are preceded by traffic, disorderly conduct, status offenses, and suspicion, investigation, or information (hereafter referred to as SII). With SII removed, 70% of the remaining 82%'s first drug contacts are preceded by traffic, disorderly conduct, and status offenses. Among cohort members with their first drug contact as a juvenile, 25% (29% with SII removed) of the first drug contacts are the first contact of their careers. Seventy percent of the remaining 75% are preceded by disorderly conduct, status, and SII. Without SII, two-thirds of the remaining 71% are preceded by disorderly conduct and status offenses. Among cohort members with their first drug contact as an adult, only 9% (10% with SII removed) of the first drug contacts are the first contact of their careers. More than two-thirds of the remaining 91% are preceded by traffic, disorderly conduct, and SII. Without SII, three-fourths of the remaining 90% are preceded by traffic, disorderly conduct, and misdemeanor theft.

The majority of those members of the 1955 Cohort with drug contacts do not have a contact for drugs as the first police contact of their delinquent or criminal career regardless of whether their drug offending commenced during the juvenile or the adult age period. The contacts preceding a drug contact for 1955 Cohort members with at least one drug contact were most likely to be

for traffic offenses, status offenses, disorderly conduct, or drugs (except for the first drug contact). With the exception of status offenses, these same contact types were also most likely to follow a drug offense. This means that if one drug contact out of all drug contacts by the members of the cohort were chosen, the best prediction (with no knowledge of the sequential ordering of the drug contact relative to other drug contacts) of the contact types immediately preceding a drug contact would be a traffic offense. The next best prediction would be disorderly conduct, followed by a drug offense. The best prediction of the contact types immediately following a drug contact would be disorderly conduct. The next best prediction would be traffic, followed by a drug offense. Traffic offenses, status offenses, and disorderly conduct are types of activity that may be classified as low-level disruptive behavior, although status offenses are disruptive only in the sense that adults regard them as undesirable forms of behavior for juveniles. Perhaps the switching pattern from these types of behavior to drugs and from drugs to these other behaviors present in the data for the 1955 Cohort indicate a need to consider further whether drug involvement is just another manifestation of a tendency to become involved in low-level disruptive behavior.

We concluded that as of 1976 drug offending was not temporally linked to either property crimes, other crimes of vice, or violent predatory behavior for the 1955 Cohort. This last finding must be regarded with caution though, since careers were followed only through age 22 and these three types of behavior may, although not likely, have developed later in that cohort's adult careers.

It is important to bear in mind when evaluating any of these findings that whether or not a contact type occurs before or after a drug offense may be a function of the likelihood of the occurrence of a specific contact type in the general population of 1955 Cohort members. Traffic, disorderly conduct, and status contacts occur relatively frequently among all contacts generated by the 1955 Cohort. Twenty-two percent of all contacts were for traffic offenses, 20% of all contacts were for disorderly conduct, 19% were for status offenses (26% ages 6-17), but only 3% of all contacts were for drugs.

Although drug offending is generally preceded by prior delinquent/criminal behavior and not the other way around, we have not yet determined the nexus between substance offenses and delinquency/crime nor even specified the degree to which they are actually connected.

Turning Back to the Prediction Problem

But this is taking us too far from the point. If the data are collapsed a bit further the nature of the relationship between juvenile and adult careers becomes more obvious. When careers are dichotomized so that serious offenders as either juveniles and/or adults are separated from others, the following diagrams, Diagrams 2A, B, C, D, and E are produced.

Note again that of the 127 cohort members in Diagram 2A who were in the serious offender categories as juveniles only 57 (44%) were there as adults. They, as we have said, accounted for 24.5% of the offenses by the 1955 Cohort (Diagram 2B). It should also be noted that these 57 constituted 61.3% of the 93 serious adult offenders and were responsible for 2,241 (82.2%) of the career offenses of the serious adult offenders. The 70 cohort members who were false positives constituted 2.7% of those who were non-serious adult offenders but committed 22.8% of the career offenses by non-serious adult offenders. The 36 cohort members who were false negatives constituted 38.7% of the serious adult offenders but had accrued only 17.8% of the career offenses by serious adult offenders. Thus the false positives were responsible for a disproportionate share of the career contacts and the false negatives were responsible for fewer of the career contacts than would be expected. Diagram 2C reveals, as you know by now, that the false negatives were more serious offenders than the true negatives and less serious than the true positives. The false positives were less serious than the true positives and more serious than the false negatives.

Diagram 2A also indicates that there was no increase in predictive efficiency over the modal category of the marginals in terms of reducing incorrect predictions of what people would be like as adults. If juvenile seriousness is utilized as a predictor of adult seriousness, 106 errors are made (70 false positives + 36 false negatives) while the modal category of the marginal would suggest that we predict that no one would be serious which would net us 93 errors. There would be no reduction in error beyond that based on the modal category of the adult marginal distribution by the use of the predictor.

On the other hand, if we ask whether juvenile status is related to adult status to a greater extent than would be expected by chance, we find that the relative improvement over chance (RIOG) is .596, that is, almost a 60% improvement over chance considering the constraints imposed by the marginal

DIAGRAM 2A, B, C, D, and E. OFFENDER TYPES, NUMBER OF OFFENDERS PRODUCED BY THEM, AND MEAN NUMBER OF OFFENSES PER OFFENDER, DICHOTOMIZED

A. Number and Percent of Cohort Members B. Number and Percent of Offenses by Cohort Member Category

<u>Adult Offender Types</u>				<u>Adult Offender Types</u>			
Juvenile	4 or -	5 or +	FALSE NEGATIVES	4 or -	5 or +		
4 or -	2495 93.8%	36 1.3%	2531 95.1%	4959 54.2%	485 5.3%	5444 59.5%	
5 or +	70 2.6%	57 2.1%	127 4.9%	1465 16.0%	2241 24.5%	3706 40.5%	
LSE POSITIVES	2565 96.4%	93 3.4%	2658 99.8%	6424 70.2%	2726 29.8%	9150 100.0%	

C. Mean Number of Offenses by Cohort Members in Category

<u>Adult Offender Types</u>		
Juvenile	4 or -	5 or +
4 or -	2.0	13.5
5 or +	20.9	39.3

D. Juvenile Offenses

<u>Adult Offender Types</u>			
Juvenile	4 or -	5 or +	
4 or -	3428 54.2%	147 2.3%	3575 56.5%
5 or +	1305 20.6%	1442 22.8%	2747 43.4%
	4733 74.9%	1589 25.1%	6322 99.9%

E. Adult Offenses

<u>Adult Offender Types</u>			
Juvenile	4 or -	5 or +	
4 or -	1531 54.1%	338 12.0%	1869 66.1%
5 or +	160 5.7%	799 28.2%	959 33.9%
	1691 59.8%	1137 40.2%	2828 100.0%

distributions. By constraints we are referring to the fact that the marginals of Diagram 2A revealed that the maximum possible correct predictions of adult statuses based on juvenile statuses were 2,624 while the observed distribution showed 2,552 adult statuses correctly predicted from juvenile statuses. The difference between chance expectations and these were very small so that a 60% improvement over chance did not mean much in terms of our goal.

There is another way of looking at it, however, and this required two tables like 1A, one in which the juvenile contacts are arrayed according to the offense category that each cohort member was in as a juvenile and as an adult. The second table arrays the adult contacts in the same manner. Of the 9,150 contacts, 6,322 were juvenile and 2,828 were adult. Thus, it is possible to see which of the contacts shown in each cell in Table 1A took place before 18 and which took place after 18. Although these additional tables are not shown, they did reveal that some cohort members' total career types consisted mainly of contacts which occurred as juveniles while other career types, those which indicated serious continuity, consisted to a lesser extent of contacts accrued during the juvenile period. Those whose juvenile and adult police contact records placed them on the left hand side of either Table 1A or 1B would have juvenile contacts disproportionately to those who were in serious categories as adults. For example, 90% of the contacts were juvenile contacts for each of the serious career categories for juveniles who were in no career or non-serious career categories as adults but as one moved across the table to the right, the proportion of the total that were juvenile contacts dropped to from 40% to 60%, particularly for those who had contacts for illegal drug and/or alcohol activity.

When careers extend only to 22 years of age (1976), as the 1955 Cohort did at the time of this analysis, the adult careers constitute a rather small proportion of the total careers, an artifact that influences the findings.

The tables to which we have referred are shown in dichotomized form as 2D for juvenile offenses and 2E for adult offenses. Diagram 2D contains only those contacts which took place during the juvenile period for the cohort members as distributed in Diagram 2A and only those which were juvenile contacts in Diagram 2B. Had these contacts been distributed according to chance as computed from the marginals, there would have been fewer contacts in the 5 or + by 5 or + and 4 or - by 4 or - cells but the very nature of the dichotomy assured a significant deviation from chance. As we have so often

said, however, the bottom line is what juvenile period behavior enables us to predict about adult period behavior.

For this we turn to Diagram 2E which presents the distribution of adult police contacts for the cohort distribution in Diagram 2A and the adult contacts from the distribution of total contacts in Diagram 2B. Note that 82.3% of the adult contacts (54.1% + 28.2%) are in the cells in which juvenile offender types were consistent with adult offender types. There were only 498 adult police contacts (338 + 160) in the opposing cells while chance based on the marginals would have placed 1,324 contacts in these cells.

Let us look at this in terms of the prediction problem. Had the modal category of the marginals been used as the predictor, that is, had we predicted that no one would be a serious adult offender, 1,137 offenses as adults would have been committed by 93 persons whom we would have predicted would not be serious adult offenders and whom we would, therefore, have predicted would have committed at most only 372 additional offenses. By using the chance number of offenses we would have predicted 1,324 offenses for the 106 error type persons whom we mentioned. They had, however, only 498 police contacts as adults. The modal category of the marginals under-predicted adult offenses by 765 ($1,137 - 372 = 765$) while chance over-predicted by 826 ($1,324 - 498 = 826$). However, use of juvenile status as a predictor would have reduced the "error" to 498, less than in either other approach. The 36 false negative cohort members, while producing fewer offenses than a chance distribution of offenses did produce 12% of the adult offenses. On the other hand, the false positives produced only 5.7% of the adult offenses. Use of the predictor, juvenile status, produces fewer errors of prediction in terms of police contacts than do other approaches.

We have been attempting to produce useful data. A statistic that sounds good is not the equivalent of producing a set of variables which, before adulthood, enable one to accurately predict adult status. It may seem that we have made little progress in this respect and that our only claim to usefulness is that we have shown that juvenile status, although not accurate as a predictor of adult status and also a strategy that produced more errors than the modal category of the marginals, does not make as many serious errors, i.e., it identifies 57 of 93 serious adult offenders, misses 36 serious adult offenders who produce 12% of all adult police contacts, but mis-identifies 70 as serious adult offenders who have produced 160 adult offenses

(5.7% of the adult total.) Although this is an improvement over previous attempts at prediction, determining the cost of a procedure that misses positive identification of 1.3% of the cohort who have committed 12% of that cohort's adult offenses while at the same time mislabeling 2.6% of the cohort who had committed only 5.7% of the offenses would be difficult. At this point we cannot say what this model would do for a 1963 Cohort.

Felony Types as a Predictor

In Assessing the Relationship of Adult Criminal Careers to Juvenile Careers, our 1980 report to NIJJDP, we produced a table in which the 1955 Cohort was dichotomized at four or fewer police vs. five or more police contacts as juveniles and as adults. This earlier model produced no increase in predictive efficiency over the modal category of the marginals, 137 errors were made if we predicted that no one would have five or more police contacts (all types of contacts) as an adult while the model produced 276 errors (249 of the 359 persons who had five or more contacts as juveniles had less than five as adults and 27 of the 1,790 who had less than five as juveniles had five or more as adults). Although this was a 76% improvement over chance considering the constraints on predictive efficiency imposed by the marginal distributions, the fact that 249 out of 359 persons with five or more contacts as juveniles did not have five or more as adults indicated that we did not have much to become excited about. If we define a serious career as having at least one felony-level police contact the 9,150 contacts and 2,658 persons in this data set are arranged somewhat differently than in Diagrams 2A and B.

We now turn to dichotomized versions of these diagrams, Diagrams 3, B, C, D, and E. As we stated, there were 76 cohort members who were in the felony-level offender types as both juveniles and adults. Although they made up only 2.8% of the cohort, they were responsible for 26.2% of the contacts and each had a mean of 30.6 contacts. The modal category of the marginals would suggest predicting that no cohort members would be in the felony-level offender types as adults and produce 171 errors rather than the 256 that positing that juvenile serious offender type is predictive of adult offender type. The latter produces a RIOC of .391, that is, a 39% improvement over the difference between chance and the maximum correct prediction considering marginal constraints, but still not much real improvement.

DIAGRAM 3A, B, C, D, and E. OFFENDER TYPES, NUMBER OF OFFENDERS PRODUCED BY THEM, AND MEAN NUMBER OF OFFENSES PER OFFENDER, DICHOTOMIZED

A. Number and Percent of Cohort Members B. Number and Percent of Offenses by Cohort Member Category

Adult Offense Types

FALSE NEGATIVES

Adult Offense Types

Juvenile	Non-Fel	Felony	
Non-Fel	2326 87.5%	95 3.6%	2421 91.1%
Felony	161 6.1%	76 2.8%	237 8.9%
ALSO POSITIVES	2487 93.6%	171 6.4%	2658 100.0%

Juvenile	Non-Fel	Felony	
Non-Fel	4272 46.7%	702 7.6%	4974 54.3%
Felony	1777 19.4%	2399 26.2%	4176 45.6%
	6049 66.1%	3101 33.8%	9150 99.9%

C. Mean Number of Offenses by Cohort Members in Category

Adult Offense Types

Juvenile	Non-Fel	Felony
Non-Fel	1.8	7.4
Felony	11.0	30.6

D. Juvenile Offenses

E. Adult Offenses

Adult Offense Types

Juvenile	Non-Fel	Felony	
Non-Fel	3025 47.8%	250 4.0%	3275 51.8%
Felony	1474 23.3%	1573 24.9%	3047 48.2%
	4499 71.1%	1823 28.9%	6322 100.0%

Adult Offense Types

Juvenile	Non-Fel	Felony	
Non-Fel	1247 44.1%	452 16.0%	1699 60.1%
Felony	303 10.7%	826 29.2%	1129 39.9%
	1550 54.8%	1278 45.2%	2828 100.0%

Although it would be difficult to argue that there is much to be obtained from the prediction standpoint, it is worthwhile to determine how the distribution of adult contacts is related to the distribution of juvenile contacts, for which we turn to Diagrams 3D and E. As in the case of Diagram 2D, the juvenile contacts were fairly evenly distributed among those who were in the serious offender categories as juveniles and those who stayed there vs. those who desisted from serious offenses as adults. On the other hand, a larger proportion of the contacts of those who were non-felony-level offenders as juveniles were found in the felony-level categories as adults. The distribution of adult police contacts (Diagram 4E) indicates that while 1,278 contacts would be missed if prediction was made from the modal category of the marginals, the error type cohort members had only 755 contacts as adults (452 contacts for those 95 who were in non-felony categories as juveniles but felony-level categories as adults and 303 for the 161 who desisted from felonies as adults), considerably less than the distribution of 1,387 contact errors for these categories that would have been produced by chance.

The analyses which we have presented combine males and females but we do have separate runs with controls for sex. It is not surprising that 55 (4.0%) of the males were in the more serious career offender groups as both juveniles and adults while only 6 (.4%, less than 1%) of the females were in these serious offender groups. Males had an average of 5.0 police contacts while females averaged 1.8 contacts. Serious offender type males had an average of 39 police contacts while females had an average of 27 police contacts.

Conclusion

While this has been a methodological exercise with the 1955 Cohort before its reduction to those with continuous residence as of 1988, it suggests that while we and others have been critical of the prediction enterprise, there are possibilities that are worth pursuing. Furthermore, while Diagrams 2A-E and 3A-E reveal the complexity of the problem, they indicate that juvenile offender careers are useful in predicting who will or will not make significant contributions to the totality of adult offenses, particularly as predictions are bolstered by breaking down the distribution of police contacts for each offender type into those which occurred as juveniles and those which occurred as adults.

Chapter 10

THE ALCOHOL/DRUG AND DELINQUENCY/CRIME CONNECTION

Introduction

Having summarized our prior research on prediction and typology development and that which we conducted concurrently with updating the 1955 Cohort, we shall now concentrate our attention on the 1955 Cohort members with continuous residence to 1988. We shall also refer to an augmented group of 1,441 persons from the 1955 Cohort who had continuous Racine residence from age 13 to 33, a larger group than the 1,357 that were defined as continuous residents from age 6 to 33.

The decision to enlarge the group available for analysis would, it was presumed, enable us to include more cohort members with the potential of having police contacts for alcohol and drug offenses but would not present us with a group that was overall markedly different in other respects from those whose continuous residence had commenced at an earlier age. The distribution of this augmented group of 1,441 persons by age period and offense type is shown in Table 1.

Comparison of the distribution of offense types and summary statistics with those found for the smaller continuous residence group in Table 2 of Chapter 4 indicates that the 7,002 police contacts for the augmented group are distributed much the same as the 6,803 contacts of the smaller group. When traffic offenses, disorderly conduct, juvenile status, and contacts for suspicion, investigation, and information are eliminated, only theft, burglary, and assault exceed the proportion of contacts for narcotics and drugs combined in either cohort group. After the age of 21, the narcotics and drugs proportion slightly exceeds even theft and assault, and is five times greater than burglary, again in either cohort group. We hypothesize that the 1963 Cohort which we have proposed for addition to the earlier three cohorts will demonstrate that narcotics and drugs have markedly increased in their proportion of police contacts in all age periods.

Variation in Drugs and Reasons for Police Contacts

In analyses presented earlier in this report drugs were dealt with as marijuana vs. others, or as misdemeanor vs. felony offenses. Most drug contacts were classified as felonies at the time of the original police contacts and more were for marijuana than for other drugs. For the type of analyses which we were conducting, more precise distinctions were unnecessary. The range of drugs which was encountered in police contacts

TABLE 1. NUMBER AND PERCENT OF AGE GROUP WITH EACH CONTACT TYPE

	6-17		18-20		21+		Total	
	N	%	N	%	N	%	N	%
Traffic	319	9.0	471	30.0	776	41.1	1566	22.3
Disorderly conduct	522	14.7	438	27.9	415	22.0	1375	19.6
Suspicion, investigation, information	536	15.1	197	12.5	138	7.3	871	12.4
Liquor	88	2.5	32	2.0	32	1.7	152	2.2
Theft	459	12.9	100	6.4	100	5.3	659	9.4
Juvenile status	988	27.0	7	.7	---	---	995	14.2
Vagrancy	53	1.5	9	.6	11	.6	73	1.0
Auto theft	81	2.3	19	1.2	3	.2	103	1.5
Sex offenses	30	.8	23	1.5	20	1.1	73	1.0
Assault	90	2.5	40	2.5	100	5.3	230	3.3
Burglary	227	6.4	69	4.4	21	1.1	317	4.5
Weapons	25	.7	27	1.7	43	2.3	95	1.4
Violent property destruction	26	.7	22	1.4	49	2.6	97	1.4
Forgery and Fraud	15	.4	19	1.2	54	2.9	88	1.3
Robbery	41	1.2	31	2.0	12	.6	84	1.2
Gambling	2	.1	3	.2	5	.3	10	.1
Narcotics/Drugs	43	1.2	63	4.0	103	5.5	209	3.0
Homicide	---	---	1	.1	4	.2	5	.1
TOTALS	3545	99.9	1571	100.0	1886	100.1	7002	99.9
CONTACTS PER PERSON		2.46		1.09		1.31		4.86
PART I	898	25.3	260	16.5	240	12.7	1398	20.0
PART I PER PERSON		.62		.18		.17		.97

among members of the 1955 Cohort is shown in Table 2. There are, of course, a multitude of other drugs on the streets in larger metropolitan areas (and probably in Racine as well) but these are the drugs that were found in police contact records. Of the 204 police contacts involving drugs which were coded, 60% involved marijuana alone. Only 4.9% of the contacts were for heroin and 12.7 were for cocaine. The narcotics, depressants, stimulants, and hallucinogens combined accounted for 27% of the police contacts, only half of the marijuana proportion. While the numbers shown in Table 2 seem small, it must be remembered that this is one cohort born in 1955. It is the first drug cohort in the Racine longitudinal research. If we think of 1970 as being the age when the most recent drug cohort could have been born, there are 15 other potential drug cohorts on the streets. Were we simply examining the incidence and prevalence of drugs, a sharp increase in arrests during recent years would undoubtedly present us with a sizeable list of persons from each of the 15 other potential drug cohorts.

One must also note that 10 of the 16 contacts by cohort members for narcotics (heroin) were after the age of 21, as were 24 of the 29 contacts for stimulants (cocaine). For analytic purposes we shall at first simply refer to police contacts for drug offenses but at a later point determine if heroin and cocaine have a special role in continuity and/or career seriousness in contrast to cannabis and other drugs.

Reason for possession of drugs is shown in Table 3. Out of the 206 coded contacts, 55.8% were simply for possession, 15.5% for possession with intent to deliver, 9.2% for buying, and 6.3% for selling. Half of all police contacts for any type of substance were for possession of marijuana and another 15% were for trading in marijuana. In short, the proportion of contacts for hard drug possession and/or trading was very small, little more than 20%. Contacts for buying, selling, and possession with intent to deliver occurred after cohort members had reached 21, while those for possession were more evenly distributed. The 18-20 age period had a disproportionate share of the contacts for possession.

The reader should remember that out of the 1,441 persons included in this continuous residence segment of the cohort there were only 29 juvenile drug offenders and 77 adult drug offenders, almost all of whom had their drug offense contacts as either juveniles or adults but not both.

Involvement with Liquor

When the 1955 Cohort's contacts were recoded to reflect the involvement of liquor in police contacts the total liquor involvement contacts rose from the

TABLE 2. OFFICIALLY RECORDED DRUG CONTACTS ACCORDING TO TYPE OF DRUG AND COMBINATIONS* OF DRUGS

	6-17	18-20	21+	Total
N A R C O T I C S				
Heroin	---	---	7	7
Methadone	---	---	1	1
Marijuana, <u>Heroin</u>	---	1	2	3
Narcotics Investigation	3	---	---	3
Narcotics Violation	2	---	---	2
	<u>5</u>	<u>1</u>	<u>10</u>	<u>16</u>
D E P R E S S A N T S				
Barbiturates	2	---	---	2
Marijuana, <u>Valium</u> , LSD, <u>Barbiturates</u>	---	1	---	1
	<u>2</u>	<u>1</u>	<u>---</u>	<u>3</u>
S T I M U L A N T S				
Cocaine	---	1	17	18
Amphetamines	1	1	---	2
Marijuana, <u>Amphetamines</u>	1	---	---	1
LSD, <u>Cocaine</u>	1	---	---	1
Marijuana, <u>Cocaine</u>	---	---	3	3
THC, <u>Cocaine</u>	---	---	4	4
	<u>3</u>	<u>2</u>	<u>24</u>	<u>29</u>
H A L L U C I N O G E N S				
LSD	3	---	---	3
PCP	---	---	4	4
<u>LSD, Cocaine</u>	1	---	---	1
Marijuana, <u>PCP</u>	---	---	1	1
Marijuana, <u>Valium</u> , <u>LSD</u> , <u>Barbiturates</u>	---	1	---	1
	<u>4</u>	<u>1</u>	<u>5</u>	<u>10</u>
C A N N A B I S				
Marijuana	17	44	31	92
THC	---	---	21	21
Marijuana <u>and unspecified</u>	1	---	---	1
<u>Marijuana, Heroin</u>	---	1	2	3
<u>Marijuana, Amphetamines</u>	1	---	---	1
<u>Marijuana, PCP</u>	---	---	1	1
<u>Marijuana, Valium, LSD</u> , <u>Barbiturates</u>	---	1	---	1
<u>Marijuana, Cocaine</u>	---	---	3	3
<u>THC, Cocaine</u>	---	---	4	4
	<u>19</u>	<u>46</u>	<u>62</u>	<u>127</u>

V A G U E D E S C R I P T I O N S

Investigation, unspecified	1	---	---	1
Raid	1	1	---	2
Overdose, drug abuse	2	5	2	9
Glue	3	---	---	3
Controlled Substance, unspecified	2	3	8	13
Unspecified drug(s)	1	---	---	1
Prescription diet pills	---	---	1	1
Unidentified Substance	---	---	1	1
Prescription drugs	---	---	1	1
Prescription w/o presc.	---	---	3	3
	<hr/>	<hr/>	<hr/>	<hr/>
	10	9	15	39
GRAND TOTAL	41	57	106	204

* Drugs which were associated with others at time of police contact appear under each appropriate heading but are italicized after the first inclusion. They are included in the GRAND TOTAL only once.

TABLE 3. REASON FOR ALLEGED DRUG POSSESSION AT TIME OF CONTACT BY AGE CATEGORY

	6-17	18-20	21+	Total
None found	3	---	---	3
Sniffing	2	---	---	2
Mention (including possible offender)	5	---	---	5
Victim	2	5	2	9
Possession	24	43	48	115
Possession with intent to deliver	2	3	14	19
Buying	2	1	10	13
Selling	1	5	26	32
Delivery	---	---	3	3
Suspected possession	---	---	2	2
Use	---	---	1	1
Overdose	---	---	1	1
Not ascertained	---	---	1	1
TOTAL	41	57	108	206

152 that were strictly for liquor violations to 316. When these were annualized the rate for number of contacts per year declined from 29.2 during the juvenile period to 17.7 during the 18-20 period and 13.5 for the after 21 period. It should be noted that when the same approach was utilized for the drug contacts, the annualized number of contacts was 8.2, 11.4, and 8.8. As we mentioned in reference to earlier annualized rates, dividing the 21+ number by 12 probably generates a somewhat lower rate than should be used for comparison with the earlier periods since the desistance rate increases rapidly during the 20s. The rate for an early 20s period would be higher.

Our decision was to commence the final analysis without controls for frequency, seriousness, or reasons for drug contact or reason for alcohol involvement. Cohort members would be categorized as juveniles and as adults as having: 1) no police contacts, 2) a non-serious career with 1-4 contacts but no police contacts for drugs and/or alcohol; 3) 1-4 including contacts for alcohol; 4) 1-4 contacts including drugs; 5) 1-4 contacts including alcohol and drugs; 6) a serious career with 5 or more contacts but no drugs or alcohol involvement; 7) a serious career with 5 or more contacts including alcohol involvement; 8) a serious career with 5 or more contacts including drug involvement; 9) a serious career with 5 or more contacts including both alcohol and drugs. This approach is identical to the frequency and seriousness approach utilized in Chapter 9.

The Delinquent Career and the Adult Career: 1955 Cohort Updated to 1988

We now turn to Diagram 1A for the 1955 Cohort, 1357 persons, as updated to 1988. As we had expected, a longer adult career revealed less desistance and more career continuity than had been found for the cohort when followed only until age 22. This is particularly true for those with serious careers and for those with either alcohol or drug involvement. We find that continuity from the juvenile period to the adult period increased for serious offenders who did not have police contacts including alcohol or drugs from 38.9% to 54.9%. Those with 5 or more police contacts, including some for alcohol, had an increase was from 51.6% to 68.2% and those with 5 or more contacts, some for drugs, from 50.0% to 62.5%. Although the number of persons in these cells was small, experienced change in the direction anticipated and those with drugs or alcohol in their records had more continuity than did others. Again, there was little continuity among those who had fewer than 5 police contacts.

As in Chapter 9, a collapsed Table 1B follows to simplify presentation of the continuity differences that we have mentioned. But more than continuity, we continue to see that the 49 cohort members with 5 or more contacts as

DIAGRAM 1A. DISTRIBUTION OF 1955 COHORT BY JUVENILE/ADULT ALCOHOL/DRUG AND DELINQUENCY/STATUS ACCORDING TO OFFICIAL RECORDS TO 1988

Offense Behavior Type JUVENILE (6-17)	Offense/Behavior Type ADULT (18 AND OLDER)									TOTAL
	1-4 Contacts					5 or More Contacts				
	No Contacts	No Alcohol/Drugs	Alcohol, No Drugs	Drugs, No Alcohol	Drugs & Alcohol	No Drugs/Alcohol	Alcohol+	Drugs+	Drugs/Alcohol+	
	1048	405	127	89	42	54	68	36	19	1888
<u>No Contacts</u>	759	133	26	20	6	6	4	2	1	957
	1.4	3.0	4.9	4.5	7.0	9.0	17.0	18.0	19.0	
<u>1-4 Contacts, No Alcohol/Drugs</u>	458	359	177	83	0	336	80	108	68	1669
	126	58	15	10	0	19	6	8	4	246
	3.6	6.2	11.8	8.3	---	17.7	13.3	13.5	17.0	
<u>1-4 Contacts, Alcohol, No Drugs</u>	83	53	61	16	0	26	21	0	13	273
	28	10	6	3	0	1	1	0	1	50
	3.0	5.3	10.2	5.3	---	26.0	21.0	---	13.0	
<u>1-4 Contacts, Drugs, No Alcohol</u>	33	38	16	10	0	0	28	20	0	145
	8	6	2	1	0	0	1	1	0	19
	4.1	6.3	8.0	10.0	---	---	28.0	20.0	---	
<u>1-4 Contacts, Drugs & Alcohol</u>	5	9	0	0	0	0	0	0	0	14
	1	1	0	0	0	0	0	0	0	2
	5.0	9.0	---	---	---	---	---	---	---	
<u>5 or More Contacts, No Drugs/Alcohol</u>	105	228	82	0	39	279	280	355	347	1715
	6	12	3	0	2	8	7	7	6	51
	17.5	19.0	27.3	---	19.5	34.9	40.0	50.7	57.8	
<u>5 or More Contacts, Alcohol +</u>	0	122	31	0	46	199	251	61	163	873
	0	5	1	0	1	4	7	1	3	22
	---	24.4	31.0	---	46.0	49.8	35.9	61.0	54.3	
<u>5 or More Contacts, Drugs +</u>	17	41	0	0	0	0	29	118	20	225
	1	2	0	0	0	0	1	3	1	8
	17.0	20.5	---	---	---	---	29.0	39.3	20.0	
<u>5 or More Contacts, Drugs & Alcohol +</u>	0	0	19	0	0	0	34	0	0	53
	0	0	1	0	0	0	1	0	0	2
	---	---	19.0	---	---	---	34.0	---	---	

DIAGRAM 1B. DISTRIBUTION OF 1955 COHORT BY JUVENILE/ADULT ALCOHOL/DRUG AND DELINQUENCY/STATUS ACCORDING TO OFFICIAL RECORDS TO 1988

Offense Behavior Type JUVENILE (6-17)	Offense/Behavior Type ADULT (18 AND OLDER)					
	No Contacts	1-4 Contacts		5 or More Contacts		TOTAL
		No Alcohol/Drugs	Alcohol and/or Drugs	No Drugs/ Alcohol	Alcohol and/or Drugs +	
<u>No Contacts</u>	1048 759 1.4	405 133 3.0	258 52 5.0	54 6 9.0	123 7 17.6	1888 957 1.3% SERIOUS CONTINUITY
<u>1-4 Contacts, No Alcohol/Drugs</u>	458 126 3.6	359 58 6.2	260 25 10.4	336 19 17.7	256 18 14.2	1669 246 15% SERIOUS CONTINUITY
<u>1-4 Contacts, Alcohol and/or Drugs</u>	121 37 3.3	100 17 5.9	103 12 8.6	26 1 26.0	82 4 20.5	432 71 7% SERIOUS CONTINUITY
<u>5 or More Contacts, No Drugs/Alcohol</u>	105 6 17.5	228 12 19.0	121 5 24.2	279 8 34.9	982 20 49.1	1715 51 54.9% SERIOUS CONTINUITY
<u>5 or More Contacts, Alcohol and/or Drugs</u>	17 1 17.0	163 7 23.3	96 3 32.0	199 4 49.8	676 17 39.8	1151 32 65.6% SERIOUS CONTINUITY

juveniles and as adults, while comprising only 3.6% of the cohort, were responsible for 31.2% of the cohort's police contacts. An additional 89 (6.6%) cohort members who were either serious offenders as juveniles or as adults but not both accounted for 23.4% so that the 10.2% of the cohort who were serious offenders as youths or adults or both had generated 54.6% of the police contacts. Those who were in the No Contact and "no offense" category comprised 55.4% of the cohort but their minor infractions amounted to 15.3% of all contacts while other persons with fewer than 5 contacts as juveniles and adults (33.9%) had 30.1% of the contacts. Note, however, that cohort members with fewer than 5 police contacts as juveniles still produced 55 persons who had serious offender careers as adults, more than had been produced by the serious juvenile offenders.

When the same analysis of the 1955 Cohort was made with controls for sex, continuity differences between groups were even more apparent, as shown in Diagram 1C. Here we present the collapsed version of the table for males; only five of the females were in the serious offender categories as both juveniles and adults. Continuity was highest for those serious juvenile offenders with contacts for drugs, 83% (all but one of the six males with drug involvement were in serious offender categories as adults), higher for the combined group involved in substances than for other serious offenders who did not have involvement with drugs or alcohol in their juvenile record. The complexity of continuity patterns is reflected, however, in the fact that among those with less serious careers, 1-4 contacts, those who had records for contacts involving alcohol had only 4.1% continuity while those with 1-4 contacts who had or did not have drug offenses had higher continuity into serious adult careers. Although the number of cohort members in each complex of cells is rather small, the point remains that the alcohol/drugs and delinquency/crime nexus becomes even more interesting as the analysis continues.

The Delinquent Career and the Adult Career: Augmented 1955 Cohort Updated to 1988

Diagrams 2A and its collapsed version, 2B, include additional 1955 Cohort members (the augmented group of 1,441). The pattern of differences in continuity between the drug and alcohol segments, serious and non-serious juvenile careers is very similar in Diagrams 1A and 2A, each based on different definitions of continuous residence, 6-33 vs. 13-33. Two relationships are consistently found: 1) the substance involved serious offenders have greater continuity than those serious offenders without

DIAGRAM 1C. DISTRIBUTION OF 1955 COHORT MALES BY JUVENILE/ADULT ALCOHOL/DRUG AND DELINQUENCY/STATUS ACCORDING TO OFFICIAL RECORDS TO 1988

Offense Behavior Type JUVENILE (6-17)	Offense/Behavior Type ADULT (18 AND OLDER)					
	1-4 Contacts			SERIOUS CONTINUITY AFTER AGE 18 5 or More Contacts		
	No Contacts	No Alcohol/Drugs	Alcohol and/or Drugs	No Drugs/ Alcohol	Alcohol and/or Drugs +	TOTAL
<u>No Contacts</u>	523 331 1.6	219 68 3.2	203 36 5.6	47 5 9.4	47 4 11.8	1069 444 2.0% SERIOUS CONTINUITY
<u>1-4 Contacts, No Alcohol/Drugs</u>	272 72 3.8	289 43 6.7	200 19 10.5	234 13 18.0	228 16 14.3	1223 163 17.7% SERIOUS CONTINUITY
<u>1-4 Contacts, Alcohol and/or Drugs</u>	59 16 3.7	48 6 8.0	76 9 8.4	0 0 ---	69 3 23.0	262 34 8.8% SERIOUS CONTINUITY
<u>5 or More Contacts, No Drugs/Alcohol</u>	105 6 17.5	217 11 19.7	121 5 24.2	279 8 34.9	921 19 48.5	1643 49 55.1% SERIOUS CONTINUITY
<u>5 or More Contacts, Alcohol and/or Drugs</u>	17 1 17.0	122 5 24.4	96 3 32.0	161 3 53.7	589 14 42.1	985 26 65.3% SERIOUS CONTINUITY

DIAGRAM 2A. DISTRIBUTION OF 1955+ COHORT BY JUVENILE/ADULT ALCOHOL/DRUG AND DELINQUENCY/STATUS ACCORDING TO OFFICIAL RECORDS TO 1988

Offense Behavior Type JUVENILE (6-17)	Offense/Behavior Type ADULT (18 AND OLDER)									TOTAL
	1-4 Contacts					5 or More Contacts				
	No Contacts	No Alcohol/Drugs	Alcohol, No Drugs	Drugs, No Alcohol	Drugs & Alcohol	No Drugs/Alcohol	Alcohol+	Drugs+	Drugs/Alcohol+	
<u>No Contacts</u>	1100 801 1.4	414 138 3.0	127 26 4.9	103 23 4.7	42 6 7.0	54 6 9.0	68 4 17.0	36 2 18.0	19 1 19.0	1963 1007
<u>1-4 Contacts, No Alcohol/Drugs</u>	491 136 3.6	377 62 6.1	192 16 12.0	83 10 8.3	0 0 ---	336 19 17.7	92 7 13.1	158 11 14.4	80 5 16.0	1809 266
<u>1-4 Contacts, Alcohol, No Drugs</u>	84 29 2.9	57 11 5.2	61 6 10.2	16 3 5.3	0 0 ---	26 1 26.0	21 1 21.0	0 0 ---	13 1 13.0	278 52
<u>1-4 Contacts, Drugs, No Alcohol</u>	33 8 4.1	38 6 6.3	16 2 8.0	10 1 10.0	0 0 ---	0 0 ---	28 1 28.0	20 1 20.0	0 0 ---	145 19
<u>1-4 Contacts, Drugs & Alcohol</u>	5 1 5.0	9 1 9.0	0 0 ---	0 0 ---	0 0 ---	0 0 ---	0 0 ---	0 0 ---	0 0 ---	14 2
<u>5 or More Contacts, No Drugs/Alcohol</u>	112 7 16.0	282 14 20.1	82 3 27.3	0 0 ---	39 2 19.5	358 10 35.8	315 8 39.4	355 7 50.7	347 6 57.8	1890 57
<u>5 or More Contacts, Alcohol +</u>	9 1 9.0	145 6 24.2	31 1 31.0	0 0 ---	46 1 46.0	274 5 54.8	300 8 37.5	61 1 61.0	163 3 54.3	1029 26
<u>5 or More Contacts, Drugs +</u>	17 1 17.0	41 2 20.5	0 0 ---	0 0 ---	0 0 ---	0 0 ---	29 1 29.0	118 3 39.3	180 3 60.0	385 10
<u>5 or More Contacts, Drugs & Alcohol +</u>	0 0 ---	0 0 ---	19 1 19.0	0 0 ---	0 0 ---	0 0 ---	34 1 34.0	0 0 ---	0 0 ---	53 2

DIAGRAM 2B. DISTRIBUTION OF 1955+ COHORT BY JUVENILE/ADULT ALCOHOL/DRUG AND DELINQUENCY/STATUS ACCORDING TO OFFICIAL RECORDS

Offense Behavior Type JUVENILE (6-17)	Offense/Behavior Type ADULT (18 AND OLDER)					
	1-4 Contacts			5 or More Contacts		
	No Contacts	No Alcohol/Drugs	Alcohol and/or Drugs	No Drugs/ Alcohol	Alcohol and/or Drugs +	TOTAL
<u>No Contacts</u>	1100 801 1.4	414 138 3.0	272 55 4.9	54 6 9.0	123 7 17.6	1963 1007 1.3% SERIOUS CONTINUITY
<u>1-4 Contacts, No Alcohol/Drugs</u>	491 136 3.6	377 62 6.1	275 26 10.6	336 19 17.7	330 23 14.3	1809 266 15.8% SERIOUS CONTINUITY
<u>1-4 Contacts, Alcohol and/or Drugs</u>	122 38 3.2	104 18 5.8	103 12 8.6	26 1 26.0	82 4 20.5	437 73 6.8% SERIOUS CONTINUITY
<u>5 or More Contacts, No Drugs/Alcohol</u>	112 7 16.0	282 14 20.1	121 5 24.2	358 10 35.9	1017 21 48.4	1890 57 54.5% SERIOUS CONTINUITY
<u>5 or More Contacts, Alcohol and/or Drugs</u>	26 2 13.0	186 8 23.3	96 3 32.0	274 5 54.8	885 20 44.3	1467 38 65.8% SERIOUS CONTINUITY

substance involvement but 2) the major differences in continuity between groups is the enormous difference between those with 1-4 police contacts and those with 5 or more police contacts. Can we conclude more than that substances may in some cases be a catalyst for continuity?

Before we turn to a summary examination of the data, let us look at one final set of diagrams. Diagrams 3A and 3B are for the inner city members of the 1955 Cohort with continuous residence to 1988. Similar diagrams were made for the relationship of juvenile to adult careers in other neighborhoods but a large proportion of these cohort members were in the No Contact or only 1-4 Contact groups. For example, while 32.1% of those with inner city residence as juveniles were in the No Contact category as juveniles and adults, 59.3% of those from other neighborhoods were there. The 9.5% of those socialized in the inner city who had serious careers as juveniles and adults consisted of 29 persons but the similar 2.2% from other neighborhoods consisted of only 19 persons. Also note that 31 persons who did not have serious careers as juveniles had serious careers as adults. They are, however, only a small proportion of the 161 cohort members who did not have serious careers as juveniles.

The point is that while 65.4% of those from the inner city who had serious careers but no recorded substance involvement had continuity from juvenile to adult careers, only 45.4% of those from other neighborhoods did so. Similarly, 83.3% of those from the inner city with serious juvenile careers and with alcohol involvement had continuity but only 50.0% of those from other neighborhoods did so. What we see is more continuity differences based on place of socialization than on substance involvement. The greatest continuity in seriousness comes with inner city socialization and alcohol involvement. While there is little difference in continuity between those who have drug involvement and those who do not among serious offenders, continuity differences are consistently far greater for those who have serious juvenile careers than for those who do not, regardless of substance involvement. The reader must remember that the 1955 Cohort was 25 years of age in 1980, the end of a period in which drug activity had not reached the proportions in Racine and other urban areas that now stirs up considerable public concern.

Serious adult continuity in the various diagrams that have just been presented is summed up in Table 4. Proportionately few of those who were in the No Contact category as juveniles had serious offender careers as adults. Relatively small proportions of those who had from 1 to 4 contacts, with or

DIAGRAM 3B. DISTRIBUTION OF 1955 COHORT MALES WITH INNER CITY RESIDENCE AS JUVENILES BY JUVENILE/ADULT ALCOHOL/DRUG AND DELINQUENCY/STATUS ACCORDING TO OFFICIAL RECORDS TO 1988

Offense Behavior Type JUVENILE (6-17)	Offense/Behavior Type ADULT (18 AND OLDER)					
	1-4 Contacts			5 or More Contacts		
	No Contacts	No Alcohol/Drugs	Alcohol and/or Drugs	No Drugs/ Alcohol	Alcohol and/or Drugs +	TOTAL
<u>No Contacts</u>	134	110	90	34	61	429
	97	31	16	4	3	151
	1.4	3.5	5.6	8.5	20.3	4.6% SERIOUS CONTINUITY
<u>1-4 Contacts, No Alcohol/Drugs</u>	190	96	94	231	155	766
	46	19	9	13	11	98
	4.1	5.1	10.4	17.8	14.1	24.4% SERIOUS CONTINUITY
<u>1-4 Contacts, Alcohol and/or Drugs</u>	10	27	29	0	0	66
	5	4	4	0	0	13
	2.0	6.8	7.3	---	---	.00% SERIOUS CONTINUITY
<u>5 or More Contacts, No Drugs/Alcohol</u>	49	102	43	161	625	980
	2	5	2	4	13	26
	24.5	20.4	21.5	40.3	48.1	65.3% SERIOUS CONTINUITY
<u>5 or More Contacts, Alcohol and/or Drugs</u>	0	59	0	171	411	692
	0	2	0	3	9	15
	---	29.5	---	57.0	45.7	80% SERIOUS CONTINUITY

TABLE 4. PERCENT OF OFFENSE CATEGORIES WITH SERIOUS CONTINUITY AS ADULTS

JUVENILE STATUS	PERCENT WITH SERIOUS CONTINUITY AS ADULTS						
	DIA 1A** (2658)	DIA 1A (1357)	DIA 2A (1441)	DIA 3C (716) Males	(641) Females	DIA 3A (303) Inner City	(837) Other
No Contacts	.5	1.3	1.3	2.0	.7	4.6	.8
1-4 Contacts, No Alcohol/Drugs	4.0	15.0	15.8	17.7	9.6	24.4	5.8
1-4 Contacts, Alcohol, No Drugs	7.0	6.0	5.8	4.1	7.6	.0	.9
1-4 Contacts, Drugs, No Alcohol	6.2	10.5	10.5	25.0*	.0	.0*	14.2
1-4 Contacts, Drugs & Alcohol	.0*	.0*	.0*	.0*	.0*	.0*	.0*
5 or More Contacts, No Drugs/Alcohol	38.9	54.9	54.4	55.1	55.8*	65.3	45.4
5 or More Contacts, Alcohol +	51.6	68.2	65.4	61.1*	100.0*	83.3	50.0
5 or More Contacts, Drugs +	50.0	62.5*	70.0	83.3*	.0*	66.6*	60.0*
5 or More Contacts, Drugs & Alcohol +	50.0	50.0*	50.0*	50.0*	.0*	.0*	50.0*
% of Cohort with 5 or + Contacts as Juveniles and as Adults, Alcohol and/or Drugs	1.0*	1.5*	1.3	2.0	.5	3.0	.9
% of Cohort's Contacts Generated by Above Group	11.8	12.7	11.6	11.4	5.2	14.1	7.8
% of Cohort with 5 or + Contacts as Juveniles and as Adults	2.1	3.6	3.8	6.1	.8	9.5	2.3
% of Cohort's Contacts Generated by Above Group	24.5	31.2	33.4	37.6	11.1	47.0	21.8

* Fewer than 10 persons in row.

** From Chapter 9.

without involvement in alcohol or drugs, had serious adult continuity. Among those who had 5 or more contacts as juveniles, with or without drug involvement, continuity into serious adult offender careers was high. More of those who had substance involvement in their careers usually had serious adult careers than did those who did not have such a record but the difference was greatest when those included in the comparison were males or had been socialized in the inner city.

The Alcohol/Drugs and Delinquency/Crime Sequence

Thus far we have dealt only briefly with the chronology of specific events in constructing various typologies, the issue of whether various types of offenses precede alcohol and/or drugs or whether alcohol and/or drugs precede other offenses. A preliminary look at the chronology of events as described in Chapter 9 revealed that the majority of drug contacts were preceded and followed by a contact for traffic, disorderly conduct, drugs, or status offenses. Traffic, disorderly conduct, and status offenses are low-level disruptive behaviors. Sixty percent of the drug contacts considered involved marijuana alone and marijuana use alone has generally been found not to induce any other types of criminal behavior but, instead, to be a part of a pattern of non-conforming behavior (Wish and Johnson, 1986). This may partially explain the likelihood for a drug contact to be preceded and followed by a contact for low-level disruptive behaviors rather than a contact for more serious misbehavior. As we have noted, the literature reveals that no one has come up with a definitive answer.

Diagrams 2 and 3 in Chapter 1 indicated that persons with long police contact careers (20 or more contacts) and at least one drug contact had that first drug contact preceded by a variety of other types of police contacts and, in most cases, followed by a variety of other police contacts. There were, of course, numerous members of the 1955 Cohort who had only a modest number of police contacts (6 to 19) and those who had fewer than 6 police contacts. As further described in Chapter 9, perusal of the careers of those cohort members who had numerous police contacts including drug use/offenses suggested that drug involvement was only one and perhaps not the most important aspect of their miscreant behavior. There are offender types for whom drug use/offenses are simply a part of the range of non-specialized illegal activities in which offenders may become involved as a product of the ways of life presented to them in their neighborhoods of socialization. Thus,

for some who have a record of drug involvement, that in itself was neither the cause of other delinquent and criminal behavior nor followed from other delinquent behavior.

Although we have frequently referred to the possibility that drug involvement is the catalyst for continuity, not all who have delinquent and criminal career continuity have records of drug involvement. All of the foregoing has given us some pause as we continue to examine the data even though tables of the type that are included in this chapter suggest that, among those who are serious offenders drugs may be a catalyst for continuity. In order that the reader may share our concern, an example of a drug-involved career is now presented.

The Case of An All-Around Street Offender

Case 4

This youngster is one of 13 children (he is characterized as the only one with a slight build). His parents' many police contacts are frequently reports of incidents or indicate trouble in the family. Their contacts don't go beyond civil matters. His father worked as a machine operator at Webster Electric and the family lived in interstitial Neighborhoods 11 and 12.

Cohort member's first contact was a theft at age 6. At age 7 he was truant and had his first felony-level contact, a fraud, for which he was not referred. He had seven contacts and no referrals at age 8--four thefts, drinking, truancy, etc.

Activity picked up when he was 9. He had three non-referred contacts for bike theft, a felony-level burglary (referred) at school, a theft at school, he beat up a girl, and had a shoplifting incident.

He was age 10 when the juvenile court became involved. Prior to age 10 contacts were for ransacking autos, questioning about stolen bikes, and breaking into a house to take bottles for deposit. He apparently was on probation at that time.

Then he had a theft contact. Court records have him *uncontrolled by parents and habitually disobedient* and with a bike theft. The Court Worker's report cites a list of 23 (?) contacts for various offenses. He was sent to Sparta for two years where he attended the on-campus school for a year and one-half and was enrolled in public school system. The staff saw him as "lost" in a large family. His parents were distressed and ashamed by his conduct. His father worked two shifts (as gardener and janitor) and his mother worked full

time to support the family. She quit her job during the time when cohort member was in Sparta to provide closer supervision of her children.

Cohort member was returned home and stayed there for six months, then he was returned to Sparta. While he was at home he had contacts for four thefts and a stolen bike.

Reports now recognize that his parents may have serious marital difficulties. They had more or less given up on plans to help him and were considering placement in a group home. He was placed in a foster home. His parents were upset because they weren't notified and wanted him home or with relatives. Nine months later he was returned to his own home.

Shortly after his return to his home from foster care he had contacts for two thefts and an attempted burglary. He admitted these charges, was found delinquent, and was committed to Wales with stay. His father was to pay damages. Within two weeks he was apprehended for armed robbery (age 15). He was sent to Wales and apparently remained there for two years. His next contact was for purse snatching, for which he was apprehended for being a party to a crime. He was again sent to Wales, then transferred to Kettle Moraine Boys School, where he stayed until he was 18.

Although the court records show him discharged from Kettle Moraine on 1/4/74, it is more likely that he was discharged in November of 1973 when he turned 18. This seems quite reasonable from the contact he had in February of 1974 for a traffic offense he had that was reported to Racine police.

About a month afterward he had three contacts for armed robbery in two days. The disposition for these seems to have been six months in the Wisconsin State Penitentiary. Before the sentence was imposed there was an apprehension request for him for violation of his current parole.

Nine months later he was charged with gambling and was fined \$15. Three weeks later he was charged with burglary, possession of controlled substance, and contributing. He was fined \$150 for the contributing charge and was sentenced to 60 days in the County Jail and two years probation on the remaining two charges.

Another charge of contributing that occurred six months later apparently has no disposition.

Cohort member had two contacts for suspicion of burglary on the same day. He was released on both. Notes from the first indicate that there was not enough evidence, although he had been seen running from the burgled home.

Although there was a positive identification made from prints found in the second home, no warrant was issued because of lack of evidence.

The last contact of record was for armed robbery and occurred a month after the two for suspicion. This time he was sentenced to four years in Green Bay.

His family lived in Neighborhoods 11 and 12, both inner city. His father had eight years of education and his mother seven years.

This completed the narrative included in *The Use of Official Records in the Development of Prediction Devices and Delinquent-Criminal Typologies* (McKim and Shannon, 1985).

UPDATED NARRATIVE, AGE 22+

There is an absence of contacts which lasted a year and nine months. His record recommenced with a contact for possession of a controlled substance and obstructing justice. The possession charge was dismissed by the District Attorney but he received 10 days in the County Jail on the obstructing charge.

He was charged with possession of a controlled substance again six months later (his next contact of record). The charge was again dismissed. On the same day of the substance charge he was also charged in a separate incident for operating a vehicle without a valid driver's license and this netted him a \$64 fine a few days later.

A charge of burglary a month later resulted in a dismissal by the court. There was a hiatus of contacts that lasted for three years.

Delivery of heroin is the next incident. This time he received a sentence of one year in the County Jail and three years of probation.

Fifteen months passed until he was charged with trespassing and possession of cocaine. For this he was fined \$300 on the trespass charge and received another 30 months in the County Jail.

It only took two months after this last court date before the record contains a notation of a probation violation and a charge of carrying a concealed weapon in another jurisdiction.

In two more months he was charged with forgery. This charge was dismissed the next month.

Felony theft came next. The site of the incident was the A-Center (for persons with problems with alcohol and drugs). In less than a month he had been sentenced to five years in Waupon.

About three years later his records indicate that he reported incidents of civil trouble and had trouble with kids.

There is nothing in the record for about two years. Two incidents mentioned him as a possible offender but there were no charges and he reported the assault of a neighbor.

After this period of apparent calm a criminal warrant was issued by Felony Court for him for burglary - habitual which was apparently served five months later. The trial five months later found him guilty. The sentence was 10 years, Wisconsin State Prison, to run concurrently with an "other jurisdiction" sentence of 18 years which was noted in the file as indicated above.

Between the date the criminal warrant was issued and its service are two charges of burglary and one of resisting/obstructing, all at different addresses. One of the burglary charges notes that he was in hiding. The record on the resisting event described him being spotted by officers and the resulting pursuit and lack of capture.

RESEARCH EVALUATION

Although this cohort member was 19 when he had his first police contact involving a controlled substance, his delinquent activities had commenced at the age of 6. His career before the drug contact had involved numerous property offenses and several which suggested a willingness to use force. Simply looking at his adult record rather than his total career could easily lead to the assumption that there is a connection between drug involvement and other illegal behaviors. This cohort member is an example of the type of person whose behavior, unless examined in its social and chronological context, leads to the erroneous conclusion that there is a simple drug/crime connection.

There is, however, no evidence that drugs were a part of his pre-age 19 behavior. His earlier and lengthy delinquent career and gaps in activity and gaps between drug contacts and property offenses make it difficult to conclude that there is a causal connection or that drugs were a catalyst that resulted in career continuation. Even the theft from the A-Center does not provide firm evidence of a drug/theft connection. There is nothing in the record to indicate that his presence there was part of an officially imposed sentence.

This case is presented because it is the type of case which, when given only superficial consideration, may seem to provide evidence of the drug/crime connection.

Another case, one in which drug involvement comes late in the offender's career, follows.

The Case of A Non-Street Offender

This cohort member grew up in a peripheral, middle class neighborhood. His father owned and ran his own retail business.

The first contact in his record was at the age of 14. He and three male juveniles were picked up for disorderly conduct in a northern residential area. Also at 14 he had a contact for being incorrigible and/or runaway.

At 16 he was charged for failure to yield in a car accident and was fined \$25.

There was nothing in his record for almost three years. He was not referred by the police for a disorderly conduct charge brought by someone because of an overly-loud stereo.

Four months later his record shows a contact for information regarding narcotics. Two days later he was in another car accident, this one not his fault. There was another similar accident two months later.

At the age of 20 he had a disorderly conduct offense described as family trouble in which the complainant was a relative. The same day, at a different address, a relative was again the complainant in an offense written up as an assault. This was cleared by exceptional clearance when his wife would not sign a complaint.

A Park Department employee was the complainant in an offense which was written up as a noise violation in the park. The police did not make a referral for this.

Five years elapsed before there was another official entry in the record. The next two entries were only mentions in investigations.

Civil trouble with a neighbor is the next entry (disorderly conduct). Apparently they settled their differences because the police did not make a referral. That same year he reported a burglary which was noted as "unfounded."

Two years later he is noted as having reported vandalism and a burglary. Within the month he was mentioned in a kidnapping investigation and was a victim in an armed robbery. A couple of months later he reported a hit and run accident.

To this point (he was 31) the only drugs involvement has been one mention in an investigation. A couple of weeks after he reported the hit and run he had a contact which resulted in a charge of delivery of cocaine. The record does not show the court's reaction. Three days later he was charged with delivery of THC and, again, no record of a sanction is available.

The last entry of record occurred three months after the THC incident. This time he was charged with delivery of THC and cocaine. It would appear that the delivery of THC which had already taken place was read into the court record. Both THC incidents were dismissed. The cocaine charge resulted in a fine of \$1,000 or 70 days in the County Jail and two years on probation.

A later probation report shows another incident of delivery of cocaine which is not part of the police record. This report states that he was sentenced to three years in the Wisconsin State Prison (stayed) and given two years probation.

RESEARCH EVALUATION

This cohort member's juvenile record did not have a single entry indicating that he might become a serious adult offender. Yet, at the age of 19 there was a suggestion of drug involvement and by the age of 31 he had become so involved that he was sentenced to the State Penitentiary. The several other police contacts that he has had bear no relationship to drug activity.

Conclusion

While we may readily produce examples of people whose drug involvement has led to all manner of property offenses and crimes against the person in the metropolis and, for that matter, here in River City, the 1955 Cohort produced little or none of this.

To be sure, we re-examined the careers of 24 persons who were in our 1985 analysis of 1955 Cohort members who had 10 or more felony-level contacts or 13 or more police contacts of any kind (excluding those with 10 or more felony contacts) and now in the 1988 continuous residence group who had 5 or more police contacts as juveniles and as adults. Another 24 persons who were not in the original 1985 analysis but now had 5 or more police contacts as

juveniles and adults were also subjected to detailed examination. The latter, it will be remembered, did not include traffic, status, or contacts for suspicion, investigation, or information. While 12 of the 48 had neither drugs nor alcohol in their records, 14 had drugs, 13 had alcohol, and 9 had alcohol and drugs. Everyone in this group of 48 cohort members had police contacts for property offenses, theft and burglary for almost everyone, robbery and auto theft for many others. Most of the 48 had numerous police contacts for low-level offenses against public order such as disorderly conduct. But, as we have seen, the order of offenses has been such that neither liquor nor drugs may be seen as either the cause or catalyst. Only a carefully developed interview would be able to determine the exact role of liquor and drugs.

As we have said, this is the first drug cohort and these findings must take that into consideration. The drug-related crimes which have made headlines for the past few years in Racine have been generated by the activities of cohorts born between 1960 and 1970. We should not be surprised that the 1955 Cohort did not produce more than a few whose lengthy delinquent and criminal careers could be the outgrowth of combining delinquent and criminal patterns of behavior with either alcohol or drug involvement. For the 1955 Cohort the more probable catalyst for continuity was liquor.

What again and again created the impression that substances were a catalyst for continuity was the fact that they had become a visible part of the urban scene in those areas where continuity in delinquency and crime was already a more traditional form of behavior than in other types of neighborhoods. It is not that drugs and alcohol were absent in other neighborhoods. They were there, played a role in the lives of the residents of these neighborhoods, but delinquency and crime were not a part of the lives of most of the residents, certainly not enough to generate continuity.

Chapter 11

SUMMARY AND CONCLUSIONS

Some of the earlier chapters in this report were written to provide the foundation for this research. They did little more than summarize the findings from our first reports on prediction and typology construction. It was necessary to do this, however, because we believed that readers should understand why we wished to continue down a course that some persons might consider sufficiently trodden already.

We have also included chapters which analyzed the data within a different framework than previously, but to settle old issues even better. All of this took place during the period during which we were slowly bringing the 1955 Cohort up to 1988.

Chapter 10 could be completed with comparative ease since everything was in perspective and the methodological issues had been dealt with, at least as much as could be done with them at this time.

Chapters 1 and 2

So now let us go back to the beginning and briefly summarize the points that we made, commencing with the first two chapters.

1. The literature reveals that research has not shown whether drug involvement leads to other delinquent and criminal endeavors or whether various patterns of criminal behavior lead to involvement with drugs.
2. Aside from the question of procedures, these data indicate that drug involvement exists independently of other delinquent and criminal behavior and that the latter exist independently of drug involvement.
3. There is also evidence that both (drugs and crime) sometimes have a common cause. They are generated in the same social environment.
4. Differences in types and patterns of delinquency/crime and alcohol/drug involvement may be associated with sex, race/ethnicity,

and socioeconomic status. These may combine differently in one metropolitan area than in another.

5. Forty percent of the 1942 and 1949 Cohort members from Racine who filled out self-reports admitted marijuana or other drug use but only 10% stated that they used it frequently or all of the time.
6. Only 1.8% of the 1942 and 1949 Cohort members had officially recorded drug involvement.
7. Official offense seriousness scores of those admitting drug involvement were at least twice as high as those who did not admit drug involvement.
8. Self-reported seriousness scores for the 1942 and 1949 Cohorts were also at least twice as high for self-reported drug offenders as for non-offenders.
9. Drug user types based on self-report data for the 1942 and 1949 Cohorts with drug admissions or offenses omitted had official and self-report seriousness scores that were similar to those of non-drug user types.
10. Official offense seriousness scores for drug offenders from the 1955 Cohort were from 2 to 6 times higher than for non-drug offenders, depending on controls utilized for comparison.
11. Most juvenile drug offenders and/or those who were in juvenile offender types failed to turn up as adult drug offenders or in adult drug offender types.
12. Most adult drug offenders and drug offender types had not been juvenile drug offenders or juvenile drug offender types.
13. Drug offenses by juveniles or adults may or may not be preceded or followed by a number of other offenses.
14. Sanctioning tended to become more severe after drug contacts for juveniles but for those who were drug offenders as adults their most

- severe sanction had come before a drug contact.
15. A l t h o u g h t h e r e w a s l i t t l e continuity from juvenile to adult offender types, continuity in general (from one serious offense type to another) was greater for those who had had drug offenses as juveniles or adults, that is, had ever had drug offenses than for those who had not had drug offenses.
 16. T h e i n c l u s i o n o f d r u g offenses in a large proportion of the cohort with serious offender careers or the admission of drug use by cohort members whose self-report placed them in serious offender types suggested that drugs might have a catalytic effect on career continuity.
 17. A l l - a r o u n d s t r e e t o f f e n d e r s were more highly concentrated in the inner city than were other types of offenders (20.6% of the 1955 Cohort lived in inner city neighborhoods that socialized 55.2% of the all-around street offenders as juveniles and 68.9% of those as adults).
 18. D r u g o f f e n d e r s w e r e l e s s concentrated in the inner city than were all-around street offenders.
 19. C o r r e l a t i o n s i n d i c a t i v e o f career continuity were highest for inner city drug users and next highest for inner city non-drug users.
 20. C o n s i d e r i n g t h e f a c t t h a t drug users are more widely dispersed than are persons with police contacts for drug offenses, a combination of social structure and social process theory will be needed to generate testable hypotheses about the complex relationship of drugs to delinquency and crime.

Chapter 3

Chapter 3 was both substantive and methodological. Describing the fluctuation of delinquency and crime in Racine's variously delineated ecological areas is complicated by the changing demographic and organizational characteristics of the spatial units that were utilized by the Racine Police Department. That they had changed from Police Grid Areas to Aldermanic Districts to Police Patrol Areas made the task even more complex. During the

period from 1950 to 1980 the inner city declined from having circa 50% of Racine's population to 20% but its proportion of the Part I offenses known to the police remained essentially the same. Similarly, while peripheral middle and upper SES areas increased from circa 6% to 28% of Racine's population, their share of the Part I offenses rose from 18.5% to about 20% of the total.

Perhaps startling to some who have a complex theoretical rationale for crime fluctuations was the fact that seasonal fluctuations from January to July of each year were greater than the variation from 1969 to the same month in 1979. This type of fluctuation, just as other types of fluctuations that may be related to exogenous variables, argues for structural rather than internal explanations of differences in delinquency and crime rates.

The various maps, diagrams, and tables included in this chapter strengthened the general social structural type of explanation of the genesis of delinquency and crime, suggesting once again that programs for amelioration of the problem must rest on a causal foundation having its roots in an understanding of the organization of society.

Chapter 4

These first three chapters set the stage for a brief presentation of the 1955 Cohort data for 1357 persons as extended to 1988. The first question to be answered concerned the representativeness of those who were still continuous residents. The second question was whether the extended cohort, now more comparable to the 1942 and 1949 Cohorts, had more frequently been involved with the police and had more serious reasons for their involvement.

1. The 1955 Cohort had 2676 members at the outset but by 1976 had only 2149 (80.3%) had continuous residence in Racine. By 1988 this was reduced to 1527 (63.1%).
2. When comparisons for offense seriousness were made with controls for sex, both males and females who remained in Racine had slightly more serious offense records than did those who had moved away.
3. Although continuous residence varied by race/ethnicity and sex, there were so few significant subgroup differences on the various measures of frequency and seriousness that we saw no problem in considering the 1988 continuous residents as

- representative of the cohort.
4. There is an increasing incidence of offenses usually defined as a threat to life and property among members of the 1955 Cohort.
 5. Drug offense rates increased disproportionately to others cohort by cohort.
 6. Annualized offense rates showed that most mean offense rates were highest during the 18-20 period and lowest at age 21 and older.
 7. Mean Part I offenses were highest during the age period 6-17, declining thereafter as cohort members became more involved in automobile and non-Part I offenses.
 8. However rates were examined, the 1955 Cohort had accumulated higher rates for serious offenses than had the 1942 and 1949 Cohorts.
 9. Although the proportion of police contacts by females that were in serious offense categories had increased, female rates for most offenses continued to be consistently lower than those for males.
 10. Among persons with police contacts in the 1955 Cohort, drugs had the most disproportional increase in contact rates between those with continuous residence in 1976 and those with continuous residence in 1988.

Chapter 5

The fifth chapter brought the ecological distribution of all-around street and drug offenders up to 1988. Among the 1988 continuous residents the concentration of all-around street offenders increased, eight inner city neighborhoods (65 neighborhoods total) being the place of socialization of 80% (juvenile) and 69.3% (adult) cohort members vs. 54% and 56.4% in 1976. Three transitional neighborhoods had socialized an additional 12% of the all-around street offenders.

Although drug offenders were spread throughout the city by neighborhood of socialization, the important and interesting trend was that by the adult period the place of socialization and probable continued residence of drug

offenders was becoming more similar to the distribution of all-around street offenders.

Recent developments in Racine tell us that this was an indication that drug offenses were becoming a more important part of the inner city's delinquency and crime scene. The 1988 continuous residence data, as organized in this chapter, revealed that as in the case of the 1976 continuous residents, those serious offenders who resided in the inner city as juveniles and had police contacts for drug offenses as juveniles desisted less from serious offender careers than did other groups based on place of socialization and the drug offender dichotomy.

Could we see this as being a characteristic of the inner city where the distribution of illegal goods and services had traditionally become part of that way of life and for some the newest and most available source of pleasure and wealth for some, but despair for others?

Chapter 6

The sixth chapter was again a methodological exercise that would better prepare us for the more definitive analyses that were forthcoming. It involved a review of several tables from earlier publications and a discussion of more recent measures, addressing the problem of proportional reduction in error. Although we do not reject the necessity of considering how marginal distributions control the extent to which errors of prediction may be reduced, we determined that Lambda or Guttman's Coefficient of Predictability with the proportion of positive and negative errors considered is sufficient for all practical purposes.

This chapter was concluded by referring to the analyses which had revealed that race/ethnicity, sex, and place of socialization had produced different patterns of relationships between variables that could be products of the organization of society (associations, education, attitudes toward social institutions, employment experiences, access to automobiles) and delinquency and/or crime. At this point we took the position that prediction may suffer from either lack of theory or from theory that directs researchers in the direction of variables that account for only a small proportion of the variance in rates of delinquency and crime.

Chapter 7

Since this was not our first venture into the exciting world of delinquent and criminal types, we next dedicated Chapter 7 to a reconsideration of our prior typology efforts.

1. A computer - constructed typology based on offense seriousness, police response, and court sanctions placed each person in each cohort in one of 23 different offender/justice system reaction types with the eight most serious types in the 1942 Cohort containing only 5.1% of the cohort.
2. Each of the above group of offenders had police contacts for felonies and Part I offenses and they accounted for 80.7% of all felonies for the 1942 Cohort.
3. The 1949 Cohort produced seven types of felony/Part I offenders who constituted 4.5% of the cohort with 74.7% of the felonies.
4. Four types making up 5.0% of the 1955 Cohort accounted for 75.7% of their felonies. Adding three more types resulted in 7.4% of the Cohort accounting for 87.2% of its felonies.
5. A number of other offender types were developed based on the juvenile period and the adult period but in no case did prediction (based on canonical analysis) of adult careers from juvenile careers exceed that based on simply the number and seriousness of police contacts and the total severity of court sanctions.
6. Little improvement in predictive efficiency was obtained when selected interview variables were added to the canonical analysis.
7. We have not rejected offender types as a useful approach to understanding career continuity because they enable us to describe the kinds of offender records which result in such and such type of continuity and are thus an advance on simple scoring systems.
8. Some of our typologies were elegant descriptive devices which lay the foundation for a sociological approach to prediction, how the content of some types might be the cement for continuity or linkages

that we have not expected.

9. As in other similar birth cohort studies, we have spoken of desistance or continuity in temporal terms as well as in terms of number of police contacts, e.g., 75% of the males who had non-traffic contacts desisted by the 6th or 7th contact.
10. Temporal persistence as a variable in offender types based on either self-report or official data, although validated by seriousness scores, failed to improve the efficiency of prediction from juvenile to adult careers.

Chapter 8

Although explanation and prediction commence with social structural variables, it has been our position that prediction derived from social process explanations should add to predictive efficiency. This was indicated by our earlier reference to analyses which determined that the complex of variables which account for a portion of the delinquency and crime in the birth cohorts varied by sex, race/ethnicity, place of socialization, and various combinations thereof.

We again reminded the reader that numerous analyses with different time frames and statistical techniques had led us to the conclusion that sanctions in themselves were part of the experiential chain that accounted for continuity and increasing seriousness of delinquent and criminal careers. Going beyond some of the earlier analyses, multiple regression analyses revealed that future juvenile offense seriousness could best be predicted at the fifth or sixth police contact but that only 38% of the variance was accounted for, with some cohort differences, of course.

When juveniles and adults were combined the best prediction could be made after the eighth or ninth contact with 40% of the variance accounted for. Age at contact (early) and race (Non-White) contributed the most to accounting for future total offense seriousness. Both should be considered as part of the intervention process rather than as simply causal antecedent variables. When they were removed from the analysis, total prior seriousness and number of prior sanctions did not produce desistance but number of sanctions had a small effect. We concluded that the linkages were complex. A high total prior

seriousness is linked with a large number of prior sanctions and a high future offense seriousness.

Our next step was to conduct path analyses at the sixth contact level in order to determine the relative strength of a number of variables. After an extensive series of analyses, we concluded that utilizing the various processual variables in an effort to interpret the effect of age at contact on future offense variables took us nowhere. Age at contact had a direct causal effect on future offense seriousness unmediated by the career variables. Persons with an early age at contact had more time for future offense seriousness. Why do some people have earlier police contacts than others aside from having earlier engaged in misbehavior? What part do structural factors play in this, that is, the nature of life experiences, perhaps experiences correlated to a degree with neighborhood milieu? How does early labeling by persons in institutional positions of power affect the course of events in career continuity? These, of course, are questions which have not been answered but which arise again and again.

Chapter 9

At this juncture we turned to an analysis of the 2,658 members of the 1955 Cohort with continuous residence since age 13, with the idea of determining if alcohol/drugs and delinquency/crime had, as of 1976, a relationship to career continuity even greater than we had heretofore noted without controls for seriousness of delinquent career and various combinations of contacts for substance involvement and seriousness.

When the data are in the computer it is rather easy to produce a coefficient of correlation or some other measure which represents the relationship of juvenile careers to adult careers, whether by a system of cardinal, ordinal, or qualitative variables or categories. This does not really enable us to observe the data as they vary in quite different patterns from one end of a continuum to the other or by categories. We, therefore, as we have frequently done before, presented a detailed table which enabled us to readily observe the distribution of police contacts, persons in the cohort, and the incidence of contacts among cohort members with different combinations of juvenile and adult careers.

Here we found that desistance was high among those with little juvenile involvement in delinquency but that continuity was high among those with high involvement, even more among those whose involvement also involved contacts for alcohol and drugs. That this pattern existed when the cohort had been followed only to age 22 once again made us consider the alcohol/drug and

delinquency/crime nexus as perhaps being one in which delinquency and crime were the paramount linking behaviors, enhanced so to speak by substance involvement.

Although not a surprise to us, that small percent of the 1955 Cohort with substance involvement and serious juvenile and adult careers (5 or more police contacts), only 1%, was responsible for 11.8% of all police contacts by the 1955 Cohort. This would suggest that dealing with that 1%, while involving a disproportional share of the misbehaviors, would take only a small bite out of crime. Casting the net more widely would involve even a greater percent of the crime, of course, but fill the prisons more rapidly and at a greater cost per street offense prevented by incapacitation.

What is so apparent is that a small proportion of the cohort with serious delinquency has rather high continuity and that the great majority of the cohort has very little involvement with the police and has little or no continuity. Still, there are as many or more who are serious offenders as adults from these non-serious groups than there are serious offenders as adults who have always been serious offenders. Alas, essentially the same situation that we noted before with other measures and typologies is found again, too many false positives and too many false negatives.

But with a different tack, we found that those with continuity for serious juvenile misbehavior to serious adult misbehavior, in both cases with alcohol and drug involvement, were responsible for a very highly disproportionate share of the adult offenses. The 1% to which we referred in the last paragraph was responsible for 39.7% of the police contacts which took place after age 18 and before 23, a period of considerable activity for the cohort.

When we cast the net a bit wider to include those who had 5 police contacts before 18 and 5 police contacts after 18, we netted 57 of the 93 serious adult offenders (61.3%) who were responsible for 82.2% of the career offenses of the serious adult offenders. Remember, this is 57 out of 2,658 1955 Cohort members.

Having previously been concerned with the juxtaposition of police contacts for drugs and other offenses, we investigated more extensively but concluded that for the most part drug contacts were preceded and followed by contacts that could be classified as low-level disruptive behavior. Since approximately two-thirds of the police contacts involving drugs were for marijuana, this was consistent with other research findings from metropolitan areas. But, for sure, drug offenses are usually preceded by other offenses.

While it was still necessary to maintain a critical stance in terms of increasing predictive efficiency over the modal categories of the marginals, dichotomizing juvenile and adult careers at fewer than 5 police contacts or 5 or more did reveal that serious juvenile careers (as represented by number of police contacts for behaviors other than traffic offenses, status offenses, or suspicion, investigation, or information) identified those who would be responsible for a large proportion of the adult police contacts, particularly those which would be committed by persons with serious careers (5 or more contacts) as adults, the type who would most likely have adult continuity.

We were now ready to conduct analyses of the 1955 Cohort members who had continuous residence to 1988.

Chapter 10

The analyses in this chapter were based on the 1,357, 1955 Cohort members with continuous residence to 1988 and the augmented group of 1,441 with a later entry point giving them continuous residence from age 13 to age 33. Both groups had essentially the same proportional distribution of offenses. The 1955 Cohort members reached the age of 15 in 1970, some years before drug offenses were commonplace in Racine. Although the incidence of drug offenses had risen from cohort to cohort and now constituted a high proportion of the 1955 Cohort's offenses, the number of persons involved (106) and number of offenses (204) were still insufficient in size to conduct a detailed analysis. That almost two-thirds of the contacts involved marijuana and less than 20% were for heroin and cocaine suggested that drug offense involvement, although a part of a large proportion of the serious offender careers of 1955 Cohort members, would not play an important role in escalation in or continuity of careers. Rather, as we had indicated from citations from the literature, it would be a part, particularly involvement in marijuana, in other low-level infractions against public order, much the same as liquor. In fact, there has been considerably more involvement with liquor (316 contacts) but with much the same continuity in serious adult offender careers.

The analysis followed the same pattern developed in Chapter 9. More continuity from the juvenile period to the adult period in serious offender careers was consistently found as we moved from the 2,658 members of the 1955 Cohort with continuous residence to those who had continuity to 1988. Continuity from the serious offender type as a juvenile to the serious offender type as an adult was generally highest for those who had either drug or alcohol involvement but this was, in comparisons where sizeable numbers of the cohort were involved, not markedly greater than for those who were serious

offenders but did not have drug or alcohol involvement. When only the males in the 1955 Cohort were included in the analysis, those who had 5 or more contacts and drug involvement had 83.3% continuity into serious adult offender types. When only those who had resided in the inner city as juveniles were involved, cohort members with alcohol involvement had 83.3% continuity to serious adult careers.

From 1% to 3% of those with 5 or more contacts as juveniles and as adults and with alcohol and/or drug involvement were responsible for circa 12% to 14% of the cohort's police contacts. If only those with 5 or more contacts as juveniles and adults without reference to substance involvement are considered, from 2% to 9% were responsible for from 22% to 47% of the police contacts. In the case of those who resided in the inner city as juveniles, 9.5% of this group was responsible for 47% of the contacts.

We could continue the summary of findings in more detail but the essence of the chapter was that 5 or more contacts as juveniles delineated a group of serious offenders with almost as much continuity to adult seriousness as did the same number with substance involvement added. Among those who resided in the inner city as juveniles in the 1960s, it also appeared that alcohol might have had even more of a catalytic effect than had drugs.

Conclusion

Since the 1955 Cohort was what we have always called our first drug cohort, we would not consider these findings generalizable to the present. This does not mean that they have any less value but does indicate, as we have compared them with the earlier cohort, that the role of drugs had been on the rise for some time before the 1980s when drug-related homicides were becoming a visible product of inner city life.

What we saw in these analyses was serious career continuity after the juvenile period as a fixture of the inner city that could readily be transformed into an even higher degree of continuity by adding drug involvement to everyday life. When this becomes a part of everyday life it becomes as difficult to eliminate as does the business martini, late afternoon scotch and water, or pre-dinner cocktail. Perhaps it is even more difficult because while those who reside outside the inner city have a multitude of exciting diversions, drugs and sex may be the only organizing principles in the lives of those who dwell therein.

Although the numerous analyses presented in this report seem to imply that drug and alcohol involvement are related to career continuity, at least to have been a catalyst for continuity, observation of the records of numerous

serious career offenders from the 1955 Cohort does not enable us to specify how it may have in some cases been the catalyst for continuity or greater continuity than that generated by other patterns of misbehavior and illegal activity. Beyond the statistical analyses presented in these chapters we have carefully inspected the records of those who have continuity and whose police contacts include problems with liquor and/or drugs. In few cases does examination reveal that substance played the catalytic role that we had suggested.

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APPENDIX A

A COMPARISON OF TWO OFFENSE SERIOUSNESS SCALES

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Introduction

The seriousness scale presented in The Bureau of Justice Statistics Bulletin, January 1984, The Severity of Crime and in abbreviated form in Report to the Nation on Crime and Justice, NCJ-87068, October 1983, pp. 4-5, will be compared with the Racine offense seriousness scale in this paper. The survey-generated scale described in The Severity of Crime was developed by the Center for Studies in Criminology and Criminal Law at the University of Pennsylvania and directed by Marvin E. Wolfgang and Robert M. Figlio. It is based on a sample of 60,000 people who were asked to respond to a large number of survey items (one sentence descriptions of criminal acts) by ranking them on a subjective/relative basis. The 60,000 sets of responses were accumulated, averaged, and a rank-order was assigned to the items based on their average scores. The final product was a scale of 204 items that range in seriousness scores from .2 to 72.1. Hereafter, this system of seriousness rank will be referred to as the BJS-WF Scale. An abbreviated version is presented on the following pages.

In the Racine research a legalistic approach was utilized in the assignment of seriousness scores. In this approach consideration was given to whether the offense was a crime against property or person and whether it was a felony, misdemeanor, or a status offense. This resulted in a scale from 1 to 6 (most serious level) with 1 = contact for suspicion, investigation, or information, 2 = juvenile status, 3 = minor misdemeanor, 4 = major misdemeanor, 5 = felony against property, and 6 = felony against person. (See Table 1 from Assessing the Relationship of Adult Criminal Careers to Juvenile Careers: Code Book on the following page.) The Racine rank ordering of offense seriousness will from now on be referred to as the Racine Scale. This approach to scaling incorporates a police assessment of seriousness since the police have the discretion to report some offenses such as drug use as either a felony or a misdemeanor. If treated as a misdemeanor, they become a major misdemeanor.

Beyond our general interest in the seriousness of delinquent and criminal behavior, its variation with demographic and social characteristics of cohort

How serious are various types of crimes?

The public's ranking of the severity of crimes was measured through a national survey

The National Survey of Crime Severity (NSCS) was conducted in 1977. It described 204 illegal events—from playing hooky from school to planting a bomb that killed 20 people in a public building. This survey of a nationwide sample of people is the largest measure ever made of how the public ranks the seriousness of specific kinds of offenses.

Severity scores were developed by asking a national sample of people to assign scores of any value they felt was appropriate to specific questionnaire items. Because of the large number of items in the severity scale, no one was asked to respond to all

the items. One innovation of the survey was that people were allowed to assign any value they felt appropriate to an item—the scale had no upper limits. Mathematical techniques were used to take everyone's answers and convert them to ratio scores that reflect the feelings of everyone in the sample. These scores were derived from geometric means that were calculated from the various scores assigned by the people who responded to the questionnaire.

The National Survey of Crime Severity found that many diverse groups of people generally agree about the relative severity of specific crimes

However, the severity scores assigned by crime victims are generally higher

than those assigned by nonvictims. For most people, the severity of a crime of theft depends on the dollar value of the loss rather than on the background of the person making the judgment.

There are some differences, however, among different groups of people.

- The severity scores assigned by blacks and members of other racial groups are generally lower than those assigned by whites.
- Older people found thefts with large losses to be slightly more severe than did people of other age groups.

How do people rank the severity of crime?

Severity score and offense			
72.1—Planting a bomb in a public building. The bomb explodes and 20 people are killed.	20.7—Selling heroin to others for resale.	12.0—A police officer takes a bribe not to interfere with an illegal gambling operation.	9.6—Breaking into a home and stealing \$1,000.
52.8—A man forcibly rapes a woman. As a result of physical injuries, she dies.	19.5—Smuggling heroin into the country.	12.0—Intentionally injuring a victim. The victim is treated by a doctor and hospitalized.	9.6—A police officer knowingly makes a false arrest.
43.2—Robbing a victim at gunpoint. The victim struggles and is shot to death.	19.5—Killing a victim by recklessly driving an automobile.	11.8—A man beats a stranger with his fists. He requires hospitalization.	9.5—A public official takes \$1,000 of public money for his own use.
39.2—A man stabs his wife. As a result, she dies.	17.9—Robbing a victim of \$10 at gunpoint. The victim is wounded and requires hospitalization.	11.4—Knowingly lying under oath during a trial.	9.4—Robbing a victim of \$10 at gunpoint. No physical harm occurs.
35.7—Stabbing a victim to death.	16.9—A man drags a woman into an alley, tears her clothes, but flees before she is physically harmed or sexually attacked.	11.2—A company pays a bribe to a legislator to vote for a law favoring the company.	9.3—Threatening to seriously injure a victim.
35.6—Intentionally injuring a victim. As a result, the victim dies.	16.4—Attempting to kill a victim with a gun. The gun misfires and the victim escapes unharmed.	10.9—Stealing property worth \$10,000 from outside a building.	9.2—Several large companies illegally fix the retail prices of their products.
33.8—Running a narcotics ring.	15.9—A teenage boy beats his mother with his fists. The mother requires hospitalization.	10.5—Smuggling marijuana into the country for resale.	8.6—Performing an illegal abortion.
27.9—A woman stabs her husband. As a result, he dies.	15.5—Breaking into a bank at night and stealing \$100,000.	10.4—Intentionally hitting a victim with a lead pipe. The victim requires hospitalization.	8.5—Selling marijuana to others for resale.
28.3—An armed person skyjacks an airplane and demands to be flown to another country.	14.1—A doctor cheats on claims he makes to a Federal health insurance plan for patient services.	10.3—Illegally selling barbiturates, such as prescription sleeping pills, to others for resale.	8.5—Intentionally injuring a victim. The victim is treated by a doctor but is not hospitalized.
25.9—A man forcibly rapes a woman. No other physical injury occurs.	13.9—A legislator takes a bribe from a company to vote for a law favoring the company.	10.3—Operating a store that knowingly sells stolen property.	8.2—Knowing that a shipment of cooking oil is bad, a store owner decides to sell it anyway. Only one bottle is sold and the purchaser is treated by a doctor but not hospitalized.
24.9—Intentionally setting fire to a building causing \$100,000 worth of damage.	13.0—A factory knowingly gets rid of its waste in a way that pollutes the water supply of a city.	10.0—A government official intentionally hinders the investigation of a criminal offense.	7.9—A teenage boy beats his father with his fists. The father requires hospitalization.
22.9—A parent beats his young child with his fists. The child requires hospitalization.	12.2—Paying a witness to give false testimony in a criminal trial.	9.7—Breaking into a school and stealing equipment worth \$1,000.	7.7—Knowing that a shipment of cooking oil is bad, a store owner decides to sell it anyway.
21.2—Kidnaping a victim.		9.7—Walking into a public museum and stealing a painting worth \$1,000.	7.5—A person, armed with a lead pipe, robs a victim of \$10. No physical harm occurs.

Almost everyone agrees that violent crime is more serious than property crime

However, people make distinctions about seriousness depending on the circumstances of the crime. For example, an assault is viewed as more serious if a parent assaults a child than if a man assaults his wife, even though both victims require hospitalization. These differences are greater for assaults that result in death.

In deciding severity, people seem to take into account such factors as—

- The ability of the victim to protect him/herself
- Extent of injury and loss
- For property crimes, the type of business or organization from which the property is stolen

- The relationship of the offender to the victim.

“White-collar” crimes, such as fraud against consumers, cheating on income taxes, pollution by factories, pricefixing, and accepting of bribes, are viewed as seriously as (or more seriously than) many of the conventional property and violent crimes.

Within particular categories of crime, severity assessments are affected by factors such as whether or not injury occurred and the extent of property loss. For example, all burglaries or all robberies are not scored at the same severity level because of the differing characteristics of each event (even though all of the events fit into the same general crime category).

7.4— Illegally getting monthly welfare checks.

7.3— Threatening a victim with a weapon unless the victim gives money. The victim gives \$10 and is harmed.

7.3— Breaking into a department store and stealing merchandise worth \$1,000.

7.2— Signing someone else’s name to a check and cashing it.

6.9— Stealing property worth \$1,000 from outside a building.

6.5— Using heroin.

6.5— An employer refuses to hire a qualified person because of that person’s race.

6.4— Getting customers for a prostitute.

6.3— A person, free on bail for committing a serious crime, purposefully fails to appear in court on the day of his trial.

6.2— An employee embezzles \$1,000 from his employer.

5.4— Possessing some heroin for personal use.

5.4— A real estate agent refuses to sell a house to a person because of that person’s race.

5.4— Threatening to harm a victim unless the victim gives money. The victim gives \$10 and is not harmed.

5.3— Lending money at an illegally high interest rate.

5.1— A man runs his hands over the body of a female victim, then runs away.

5.1— A person, using force, robs a victim of \$10. No physical harm occurs

4.9— Snatching a handbag containing \$10 from a victim on the street.

4.8— A man exposes himself in public.

4.6— Carrying a gun illegally.

4.5— Cheating on Federal income tax return.

4.4— Picking a victim’s pocket of \$100.

4.2— Attempting to break into a home but running away when a police car approaches.

3.8— Turning in a false fire alarm.

3.7— A labor union official illegally threatens to organize a strike if an employer hires nonunion workers.

3.6— Knowingly passing a bad check.

3.6— Stealing property worth \$100 from outside a building.

3.5— Running a place that permits gambling to occur illegally.

3.2— An employer illegally threatens to fire employees if they join a labor union.

2.4— Knowingly carrying an illegal knife.

2.2— Stealing \$10 worth of merchandise from the counter of a department store.

2.1— A person is found firing a rifle for which he knows he has no permit.

2.1— A woman engages in prostitution.

1.9— Making an obscene phone call.

1.9— A store owner knowingly puts “large” eggs into containers marked “extra-large.”

1.8— A youngster under 16 years old is drunk in public.

1.8— Knowingly being a customer in a place where gambling occurs illegally.

1.7— Stealing property worth \$10 from outside a building.

1.6— Being a customer in a house of prostitution.

1.6— A male, over 16 years of age, has sexual relations with a willing female under 16.

1.5— Taking barbiturates, such as sleeping pills, without a legal prescription.

1.5— Intentionally shoving or pushing a victim. No medical treatment is required.

1.4— Smoking marijuana.

1.3— Two persons willingly engage in a homosexual act.

1.1— Disturbing the neighborhood with loud, noisy behavior.

1.1— Taking bets on the numbers.

1.1— A group continues to hang around a corner after being told to break up by a police officer

0.9— A youngster under 16 years old runs away from home.

0.8— Being drunk in public.

0.7— A youngster under 16 years old breaks a curfew law by being out on the street after the hour permitted by law.

0.6— Trespassing in the backyard of a private home.

0.3— A person is a vagrant. That is, he has no home and no visible means of support.

0.2— A youngster under 16 years old plays hooky from school

Source: *The seriousness of crime: Results of a national survey* (forthcoming). Center for Studies in Criminology and Criminal Law, University of Pennsylvania, Philadelphia. The entire questionnaire will be published verbatim in a forthcoming technical report of the Bureau of Justice Statistics. (The entries here have been slightly edited.)

TABLE 1. SERIOUSNESS OF POLICE CONTACTS: ORDINAL RANKING OF SIX MAJOR CATEGORIES AND THE OFFENSES INCLUDED IN EACH

Score

- 6 Felony Against Persons: The following offenses were given a score of 6 when treated as felonies by the police.
- | | |
|-----------------|----------|
| Robbery | Homicide |
| Assault | Escapee |
| Sex Offenses | Suicide |
| Narcotics/Drugs | |
- 5 Felony Against Property: The following offenses were given a score of 5 when treated as felonies by the police.
- | | |
|------------|------------------------------|
| Burglary | Forgery |
| Theft | Fraud |
| Auto Theft | Violent Property Destruction |
- 4 Major Misdemeanor: The following offenses were given a score of 4 when treated as misdemeanors by the police.
- | | |
|-----------------|------------------------------|
| Forgery | Assault |
| Escapee | Fraud |
| Theft | Violent Property Destruction |
| Narcotics/Drugs | Burglary |
| Weapons | |
- 3 Minor Misdemeanor: The following offenses were given a score of 3 when treated as misdemeanors by the police.
- | | |
|--------------------|---------------------------|
| Obscene Behavior | Moving Traffic Violations |
| Disorderly Conduct | Other Traffic Offenses |
| Vagrancy | Gambling |
| Liquor Violations | Family Problems |
| Sex Offenses | Other |
- 2 Juvenile Status: The following offenses were given a score of 2 when the alleged offender was under 18 years of age.
- | | |
|--------------------|-----------------------|
| Vagrancy | Incorrigible, Runaway |
| Disorderly Conduct | Truancy |
- 1 Contact for Suspicion, Investigation, Information: The category was given a score of 1 when the complaint report indicated a contact for any of these reasons.

members and its change from cohort to cohort and time period to time period, is our concern with the relationship of the seriousness of offense types to the resultant severity of sanctions. Some sort of offense severity and severity of sanctions ranking process must be developed because it would be very difficult to examine this relationship event by event or to resort to a gross classification (such as felony or misdemeanor) since the latter might tend to lead to an attenuation of the correlation between seriousness and severity of sanction. The legalistic approach upon which the Racine Scale is based and the survey approach represented by the BJS-WF Scale are two examples of more refined scaling procedures.

A comparison of the Racine Scale and the BJS-WF Scale has two primary benefits: first of all, if a similarity is found between the two rankings of levels of seriousness it lends support to the validity of both of the scaling attempts. Secondly, since the Racine Scale represents the legalistic approach and the BJS-WF Scale takes a survey approach, an examination of the amount of agreement or correlation between the two scales may allow for some conclusions about the relationship between popular opinion on the seriousness of offenses and legal definitions of seriousness of offenses. This is the first step in determining whether official response (i.e., police dispositions and court sanctions) is a reflection of popular attitudes, structured legal considerations, both of these, or is simply random occurrence.

Comparison of BJS-WF Scale and Racine Scale

In order to compare the two scales the items in the BJS-WF Scale must be linked to the appropriate police contact types of the 1942, 1949, and 1955 Cohort data of the Racine study. Once this matching is completed the comparison of the two scales can proceed in either one of two directions but in either case the first step is to assign to each of the BJS-WF items a police contact type (Vagrancy, Homicide, etc.) and contact level of seriousness (felony against person, felony against property, major misdemeanor, minor misdemeanor, status offense, contact for suspicion, investigation, or information). In order to translate the BJS-WF items into offense events to which the typology of BJS-WF contacts could be applied, simplification was necessary. This proved to be one of the two major problems in the comparison of the two systems of offense events. In the BJS-WF Scale items the following dimensions of offenses were fairly explicitly represented: 1) the legal act or acts, 2) the relationship of the victim to the perpetrator, 3) the number of perpetrators, 4) the amount of money involved if it was a crime against property, 5) the place of the crime

(residence or non-residence), and 6) the final effect of the crime (whether it resulted in death, serious injury, injury, or no injury and if death was the result of the incident, the number of deaths involved). Variation in any of these dimensions affects the average BJS-WF Scale seriousness score assigned to a particular item. Unfortunately, not all these aspects are explicitly included in the coded contact data of the Racine study, hence the need for simplification of the BJS-WF Scale items.

The second problem evolved from the nature of the criminal incidents in and of themselves. In the items chosen for the BJS-WF Scale it is often the case that the act of original intent and the effects of that act justify assigning more than one contact type to a single incident. The problem of multiple offense types per single incident also occurred during the coding of police contacts for the Racine study and led to the assignment of multiple-contact codes to individual contacts. To deal with these multiple codes when assigning seriousness to the Racine contact types the multiple codes were collapsed and the most serious offense was the basis of the seriousness level assigned to the contact. In the interests of comparability, the same approach was considered for use with the BJS-WF Scale items. That is, only a single contact type was assigned to each offense item and the contact type assigned was the most serious of those contained in the offense incident.

This approach was not the only one possible and consideration was given to the use of two others, one based on a multiple-code typing of the BJS-WF Scale items and the other based on a typing of BJS-WF Scale items by originating criminal act. (For example, if a robbery occurs with a resultant death to the victim, only the robbery and not the homicide would be considered in the coding of type of contact.)

The first alternative approach would be to retain the multiple contact types for each single BJS-WF Scale item. This approach would have the advantage of retaining more of the detail of the items of the BJS-WF Scale. It would, however, have the disadvantage of making much more complex the process of assigning a seriousness based on the six levels of seriousness in the Racine Scale. This would only be practical if we were looking at each offense incident, item by item. Referring to item 72.1 of the BJS-WF Scale (a bomb explodes in a building and 20 people are killed), seriousness would have to be some derived, systematic combination of the two levels of seriousness represented, in this case a level equal to 5 for violent property destruction and a level of 6 for homicide. Any systematic combination would, of necessity, be arbitrary. More importantly, this approach to coding contact

type of the BJS-WF Scale items would, when the seriousness of the items is considered, cause a problem with comparability to the Racine data.

Although this approach is not good for assignment of a seriousness score to each BJS-WF scale item based on the Racine rank-ordering 1-6, it is useful in assigning a BJS-WF Scale rank-order to the contact types represented in the data of the Racine study. If each BJS-WF Scale item is classified according to the one or more types of offenses that constitute the criminal incident, then the BJS-WF Scale item seriousness score will be included in the average BJS-WF Scale seriousness for each contact type represented. If multiple contact types in the BJS-WF Scale items are retained and used to classify each item, it is still possible to compute an average BJS-WF Scale score for each contact type.

With the second alternative approach, instead of referring to the most serious of the offenses in an item only the originating offense and not the consequences would be considered. For example, item 72.1 of the BJS-WF Scale items is a Violent Property Destruction that resulted in the deaths of 20 people. Instead of being coded as a Homicide it would be coded as a Violent Property Destruction. The difference in offense seriousness would be a change from a level of 6 to a level of 5. Unfortunately, if the crime of origin (in the Violent Property Destruction example) is used the "intent" of the perpetrator may become a pivotal matter which is too nebulous for the legal system to deal with and too difficult to ascertain by the respondents to the short items of the BJS-WF Scale. In our example (the Violent Property Destruction and 20-person Homicide) the offender may have intended to do only property damage or his purpose may have been to commit murder. Another item in the BJS-WF Scale that illustrates the problems involved in this approach is item 19.5. Item 19.5 involves reckless driving with the resultant death of an individual. If offense of origin were used, this would be classified as a traffic contact, which is only a minor misdemeanor. If, on the other hand, the most serious aspect of the incident, the homicide, were used it would be classified as a homicide, which is a felony against a person. This alternative approach was not deemed practical and therefore was not applied in the conversion of the BJS-WF Scale items to the Racine police contact types.

Procedure I: Comparison of BJS-WF Scale and Racine Scale of Seriousness

After each of the BJS-WF Scale items had been assigned or matched to the 30 police contact types, the BJS-WF Scale scores and Racine rank-order categories of seriousness were compared. Because the BJS-WF Scale survey items tended to include incidents of a civil rather than criminal nature and

items of "white collar" crime, the matching was incomplete and not all of the items could be included in one of our 30 original types (there were 21 such items). The items in the BJS-WF Scale were divided into quintiles based on the ordinal ranking of the BJS-WF Scale scores. Since it was found that only the five most serious rank-order categories were represented in the BJS-WF Scale items, the Racine rank-order of seriousness was limited to only the five levels represented by the BJS-WF Scale items. (From now on in the analysis the Racine rank-order of seriousness will be limited to only the five most serious contact categories.) All items in the highest BJS-WF Scale quintile were assigned a BJS-WF Scale seriousness score of 5, items in the next highest quintile were assigned a seriousness score of 4, and so on. These scores were compared to the Racine rank-order categories of contact seriousness, item by item (Table 1). If there is a similarity between the average BJS-WF Scale score of seriousness and the Racine Scale of seriousness it is to be expected that a rather high positive correlation would occur. Kendall's Tau was .592 (Table 2). This implies more than a modest linear relationship between the BJS-WF Scale of Seriousness (the survey approach) and the Racine Scale (the legalistic approach).

Procedure II: Comparison of BJS-WF Scale and Racine Scale of Seriousness

The two scales were also compared by averaging the BJS-WF Scale scores for each contact type. A "weighting" of each of our contact types could be arrived at by using the average score of each BJS-WF Scale item that would be included in a particular contact type category. To accomplish this, two of the three approaches to the assignment of BJS-WF Scale items to Racine police contact types discussed earlier were used. These two methods will be referred to as BJS-WF Approach 1 and BJS-WF Approach 2 (see Table 3). Approach 1 to dealing with BJS-WF Scale scores assigned each item of the BJS-WF Scale to the contact type which represented the most serious offense included in each offense incident. At this point it should be mentioned that not all of the police contact types were represented by items in the BJS-WF Scale. The contact types not included when Approach 1 was used were Drugs (major misdemeanor), Violent Property Destruction (major misdemeanor), Forgery (major misdemeanor), Traffic (minor misdemeanor), Vagrancy (status offense), Disorderly conduct (status offense), Liquor (felony), and Contact for suspicion. Only 23 contact types remained for the analysis. Approach 2 to dealing with the BJS-WF Scale scores retained the multiple contact classifications of the BJS-WF Scale items when more than one offense type was involved and based the assignment to contact type on whatever contact types were present in the offense incident.

TABLE 1. BJS-WF SCALE SERIOUSNESS SCORES BY QUINTILES AND RACINE RANK OF TYPE SERIOUSNESS SCORES*

Quintile 5		Quintile 4		Quintile 3		Quintile 2		Quintile 1	
BJS	RAC								
72.1	5	17.7	5	9.7	4	6.6	5	2.9	3
52.8	5	17.5	5	9.7	4	6.6	4	2.8	4
47.8	5	17.1	5	9.7	5	6.5	5	2.4	3
43.9	5	16.9	4	9.7	4	6.4	2	2.2	3
.2	5	16.9	5	9.7	4	6.2	4	2.2	3
9.2	5	16.8	5	9.6	4	6.2	3	2.1	3
35.7	5	16.6	5	9.4	4	6.1	2	2.1	2
35.6	5	16.5	5	9.4	5	6.1	4	1.9	2
33.8	5	16.4	5	9.3	5	5.7	2	1.9	4
33.0	5	15.9	3	9.2	4	5.5	2	1.9	3
32.7	5	15.7	4	9.0	4	5.4	5	1.7	2
30.5	5	15.7	5	9.0	4	5.4	5	1.7	2
30.0	5	15.6	5	8.9	5	5.3	4	1.7	3
27.9	5	15.5	4	8.6	5	5.1	2	1.6	2
26.3	5	14.6	5	8.5	5	5.1	5	1.6	2
25.8	5	14.1	4	8.5	3	5.0	4	1.6	2
25.2	5	13.9	4	8.3	4	4.9	3	1.6	3
24.9	4	13.7	5	8.2	3	4.7	2	1.5	5
24.8	5	13.5	4	8.0	4	4.6	3	1.5	2
24.5	4	13.3	5	8.0	5	4.5	4	1.4	5
24.5	4	12.7	4	7.9	4	4.4	4	1.4	5
22.9	5	12.2	4	7.9	3	4.4	4	1.4	3
22.3	4	12.0	4	7.9	5	4.4	5	1.3	5
21.2	5	11.9	5	7.6	4	4.3	4	1.3	5
21.0	5	11.8	5	7.5	5	4.2	4	1.1	2
20.6	5	11.8	5	7.4	4	3.8	2	1.1	2
20.1	5	11.7	5	7.3	5	3.6	3	1.1	2
19.5	5	11.4	4	7.3	3	3.6	3	1.1	1
19.5	5	11.3	5	7.3	4	3.6	4	.9	1
19.5	5	10.9	4	7.2	5	3.5	2	.8	1
19.0	5	10.8	4	7.2	4	3.3	4	.8	2
18.3	5	10.5	5	7.1	5	3.3	3	.8	2
18.0	5	10.4	5	6.9	5	3.3	5	.7	1
17.9	5	10.3	5	6.9	4	3.2	4	.6	2
17.8	5	10.3	4	6.9	4	3.1	4	.5	2
17.8	5	10.3	4	6.8	3	3.1	3	.3	2
				6.7	5	3.1	4	.2	1

* Racine rank category has levels 1 through 5 instead of levels 1 through 6 because rank category 1, contact for suspicion, investigation, or information, is not represented in the BJS-WF Scale items. Some of the BJS-WF Scale items could not be classified by our contact types and were also eliminated. The number of items eliminated equalled 21 of the 204 total BJS-WF Scale items.

TABLE 2. DISTRIBUTION OF BJS-WF SCALE SERIOUSNESS SCORE BY RACINE RANK-ORDER OF SERIOUSNESS

BJS-WF Seriousness Score (1-5)	Racine Rank-Order of Seriousness (1-5)				
	1	2	3	4	5
5	0	0	0	4	32
4	0	0	1	14	21
3	0	0	5	18	14
2	0	8	7	15	7
1	5	16	9	2	5

Kendall's Tau B = .592, which implies a positive category-rank linear relationship.

When Approach 2 was used there were 24 contact types, including the same 23 contact types used for Approach 1 but with the addition of the Traffic contact type (see Table 3). (Traffic is included and ranked at such a high level because the only BJS-WF Score item which contained a traffic offense resulted in the death of a victim.) Once the averaging process was completed, the Racine contact types were ranked by the relative size of these computed BJS-WF Scale average scores. This made possible a new "BJS-WF Scale Ranking" of our contact types which were then compared to the results of the original (Table 1, Chapter 4, Assessing) ranking of the contact types used in the Racine study. Also, an average BJS-WF Scale score was computed for each of the five levels of seriousness used with the Racine data. The rank-order of the average BJS-WF Scale scores agreed with the Racine rank-ordering by contact seriousness category (Table 4).

Either of these two approaches to comparison permits an examination of the degree of congruity found between the two systems of seriousness ranking. The first technique answers the question of the similarity of these two approaches (legalistic vs. survey) with respect to scaling of criminal events and if a direct positive relationship is found, reflects well on the validity of both systems. The second technique also accomplishes this and additionally lends itself to a further refinement and discrimination of the ranking of the seriousness of criminal offenses. This rank-ordering of contact types by BJS-WF Scale average seriousness scores also allows for a meaningful assessment of

TABLE 3. RANK-ORDERING OF RACINE CONTACT TYPES ACCORDING TO BJS-WF SCALE SERIOUSNESS SCORES

APPROACH 1			APPROACH 2		
Contact Type	BJS-WF Rank	Rac. Rank*	Contact Type	BJS-WF Rank	Rac. Rank
Homicide	23	5	Homicide	24	5
VPD, F	22	4	VPD, F	23	4
Assault, F	21	5	Sex Off., F	22	5
Sex Off., F	20	5	Traffic, M	21	2
Robbery	19	5	Assault, F	20	5
Drugs, F	18	5	Robbery	19	5
Fraud, F	17	4	Drugs, F	18	5
Assault, M	16	3	Fraud, F	17	4
Forgery, F	15	4	Assault, M	16	3
Auto Theft	14	4	Theft, F	15	4
Theft, F	13	4	Forgery, F	14	4
Burglary, F	12	4	Auto Theft	13	4
Fraud, M	11	3	Burglary, F	12	4
Sex Off., M	10	2	Fraud, M	11	3
Burglary, M	9	3	Sex Off., M	10	2
Weapons	8	3	Burglary, M	9	3
Theft, M	7	3	Weapons	8	3
Liquor, M	6	2	Theft, M	7	3
Dis. Cond., M	5	2	Liquor, M	6	2
Gambling	4	2	Dis. Cond., M	5	2
Incor-Runaway, SO	3	1	Vagrancy, M	4	2
Vagrancy, M	2	2	Gambling	3	2
Truancy, SO	1	1	Incor-Runaway, SO	2	1
			Truancy, SO	1	1

* Racine rank categories originally had levels 1 through 6 but since level 1, contact for suspicion, investigation, or information is never represented in BJS-WF Scale items, the scale for Racine rank categories was converted to a scale of 1 through 5 for this comparison.

TABLE 4. RANGE, MEAN, AND MEDIAN OF BJS-WF SCALE SCORES WITHIN RACINE TYPE SERIOUSNESS SCORES

	TS-5	TS-4	TS-3	TS-2	TS-1
BJS-WF Range	1.3-72.1	1.9-24.9	1.4-15.9	.3-6.4	.2-1.1
BJS-WF Mean	17.71	8.47	4.70	2.53	.70
BJS-WF Median	16.40	9.00	3.30	1.60	.80
N	80	53	21	24	5

the relationship between BJS-WF Scale seriousness scores and the Racine study severity of sanctions scale.

Relationship Between BJS-WF Scale of Seriousness and Racine Severity of Sanctions Scale

Before further consideration of this relationship, several qualifications should be made. First, as mentioned earlier, there is not absolute congruity between the BJS-WF Scale items and the Racine contact types. Some BJS-WF Scale items cannot be included in the Racine contact categories and some of the Racine contact types are not represented in the BJS-WF Scale items. This has some effect on a comparison of given levels of seriousness in the BJS-WF Scale scoring procedure. Secondly, the BJS-WF Scale assignment of seriousness is based not just on offense types but also on other factors such as personal relationships between victim and perpetrator, etc. These elements are not present in the Racine study categorization of offenses and thus may create an ineradicable disparity between the two scales of seriousness which impacts on the relationship between the BJS-WF Scale of seriousness and the Racine severity of sanctions scale.

At this point it should also be mentioned that the BJS-WF Scale items over-represent offenses of a very serious and somewhat unusual nature while the police contacts of the Racine data tend to be, overall, of a less serious, more mundane nature (Table 5). For example, the BJS-WF Scale does not include

TABLE 5. PERCENT OF BJS-WF SCALE ITEMS FALLING IN EACH SERIOUSNESS LEVEL OF RACINE SCALE

	Racine Seriousness Rank					Items Excluded
	5	4	3	2	1	
%	40.2	29.4	6.4	11.8	1.9	10.3
N	82	60	13	24	4	21

Traffic offenses or very many Disorderly Conduct offenses, two contact types which appear frequently in the Racine data. In fact, of all of the BJS-WF Scale items that could be translated into contact types represented in the Racine data, 40% are assigned to the most serious category (5 - felony against person). Perhaps part of the explanation for this lies in the "range" of the seriousness of offenses included in some of the legalistically defined

criminal contact types. For example, in the area of sex offenses if a male over 16 has sexual relations with a willing female under the age of 16, it is considered to be a felony-level sex offense and is given the same seriousness score as a violent rape.

In the consideration of whether or not a relationship is present between seriousness of offense and severity of sanction, BJS-WF Approach 1 provides the basis for the seriousness ranking.

The relationship between the justice system response (as represented in the Racine severity of sanctions scale, 0-75) and the seriousness of the criminal offense (based on BJS-WF Approach 1 to rank level of contact seriousness, Table 3) was examined first by means of a gross categorization of police disposition and court sanctions into three levels of severity to see if there is any discernible pattern of variation as offense seriousness rank increases. The three levels are counseled and released, dismissed by court, and all other court dispositions. Not only do these three levels represent increasing levels of response severity, they also indicate the degree of involvement with the system as a whole. At level 1 (Counselled and released) there is police involvement, at level 2 there is police and court involvement, and at level 3 there is involvement with police, court, and court imposed sanctions (Tables 6A and 6B). From Tables 6A and 6B it is apparent that juveniles were likely to penetrate the official framework more deeply than adults once they were officially involved. This may reflect differences in due process or the possibility that official involvement with juveniles was delayed and even avoided as long as possible compared to adults simply because they were children and unofficial responses were deemed more appropriate. This is evidenced by the higher percentage of counseled and release for juveniles than for adults, contact by contact, and by the generally higher percentage dismissals for adults compared to juveniles. Overall, there appears to be no discernible pattern between either percentage of counseled and released or percentage of dismissals and ranked seriousness of police contacts (BJS-WF Approach 1).

Another way of examining the relationship between relative seriousness of police contact types (BJS-WF Approach 1) and the severity of sanctions was to consider the median and mode of the sanction severity for each contact type (Tables 7A and 7B). When the Racine severity of sanctions scale includes dismissals the modal category for 18 of the 23 contact types was dismissal. Because of the small number of sanctioned offenses for some of the contact categories and because of the dispersion of sanction type, the mode is not an

TABLE 6A. DISTRIBUTION OF JUVENILE SANCTIONS BY CONTACT TYPE AND POLICE AND COURT DISPOSITIONS (DISMISSALS VS. OTHERS)

BJS-WF RANK ORDER	Police Dispositions			Court Dispositions				
	N 0-75	0	%	N 1-75	01	%	N 2-75	%
Homicide	1	0	---	1	0	---	1	100.0
VPD, F	9	7	77.8	2	1	50.0	1	50.0
Assault, F	9	5	55.6	4	1	25.0	3	75.0
Sex Off., F	13	9	69.2	4	2	50.0	2	50.0
Robbery	32	12	37.5	20	2	10.0	18	90.0
Drugs, F	43	24	55.8	19	10	52.6	9	47.4
Fraud, F	6	6	100.0	0	0	----	0	---
Assault, M	80	57	71.3	23	5	21.7	18	78.3
Forgery, F	14	3	21.4	11	0	----	11	100.0
Auto Theft	107	23	21.5	84	11	13.1	73	86.9
Theft, F	38	15	39.4	23	9	39.1	14	60.9
Burglary, F	198	90	45.5	108	16	14.8	92	85.2
Fraud, M	2	2	100.0	0	0	----	0	----
Sex Off., M	30	26	86.7	4	0	----	4	100.0
Burglary, M	20	13	65.0	7	3	42.9	4	57.1
Weapons	30	22	73.3	8	3	37.5	5	62.5
Theft, M	569	440	77.3	129	31	24.0	98	76.0
Liquor, M	167	115	68.9	52	14	26.9	38	73.1
Dis. Cond., M	1157	1099	95.0	58	15	25.9	43	74.1
Gambling	6	6	100.0	0	0	----	0	----
Incor-Runaway, SO	1113	1011	90.8	102	21	20.6	81	79.4
Vagrancy, M	107	95	88.8	12	7	58.3	5	41.7
Truancy, SO	39	34	87.2	5	0	----	5	100.0
<i>Not in BJS-WF Scale</i>								
Dis. Cond., SO	20	20	100.0	0	0	----	0	----
Vagrancy, SO	1	1	100.0	0	0	----	0	----
Liquor, F	0	0	----	0	0	----	0	----
Drugs, M	6	4	66.7	2	2	100.0	0	----
Forgery, M	2	0	----	2	1	50.0	1	50.0
Traffic	268	34	12.7	234	30	12.8	204	87.2
VPD, M	20	4	20.0	16	2	12.5	14	87.5

0 = Counseled and released; 1 = Dismissed; 2-75 = Court Sanctions

TABLE 6B. DISTRIBUTION OF ADULT SANCTIONS BY CONTACT TYPE AND POLICE AND COURT DISPOSITIONS (DISMISSALS VS. OTHERS)

BJS-WF RANK ORDER	Police Dispositions			Court Dispositions				
	N 0-75	0	%	N 1-75	1	%	N 2-75	%
Homicide	3	2	66.7	1	0	---	1	100.0
VPD, F	7	1	14.3	6	6	100.0	0	----
Assault, F	15	7	46.7	8	5	62.5	3	37.5
Sex Off., F	9	5	55.6	4	2	50.0	2	50.0
Robbery	46	14	30.4	32	14	43.8	18	56.3
Drugs, F	111	27	24.3	84	39	46.4	45	53.6
Fraud, F	9	5	55.6	4	2	50.0	2	50.0
Assault, M	72	49	68.1	23	11	47.8	12	52.2
Forgery, F	22	7	31.8	15	8	53.3	7	46.7
Auto Theft	28	8	28.6	20	10	50.0	10	50.0
Theft, F	31	16	51.6	15	10	66.7	5	33.3
Burglary, F	72	36	50.0	36	19	52.8	17	47.2
Fraud, M	29	14	48.3	15	8	53.3	7	46.7
Sex Off., M	55	16	29.1	39	15	38.5	24	61.5
Burglary, M	2	1	50.0	1	0	----	1	100.0
Weapons	47	16	34.0	31	11	35.5	20	64.5
Theft, M	157	80	50.9	77	14	18.2	63	81.8
Liquor, M	128	38	29.7	90	24	26.7	66	73.3
Dis. Cond., M	1678	1397	83.3	281	52	18.5	229	81.5
Gambling	9	2	22.2	7	4	57.1	3	42.9
Incor-Runaway, SO	2	2	100.0	0	0	----	0	----
Vagrancy, M	71	37	52.1	34	11	32.4	23	67.6
Truancy, SO	0	0	----	0	0	----	0	----
<i>Not in BJS-WF Scale</i>								
Dis. Cond., SO	0	0	----	0	0	----	0	----
Vagrancy, SO	0	0	----	0	0	----	0	----
Liquor, F	0	0	----	0	0	----	0	----
Drugs, M	17	6	35.3	11	8	72.7	3	27.3
Forgery, M	3	1	33.3	2	1	50.0	1	50.0
Traffic	836	67	8.0	769	103	13.4	666	86.6
VPD, M	37	17	45.9	20	6	30.0	14	70.0

0 = Counseled and released; 1 = Dismissed; 2-75 = Court Sanctions

TABLE 7A. RACINE POLICE CONTACT TYPES AND THE MEDIAN OF THE RACINE SEVERITY OF SANCTIONS SCALE (1-75)

NUMBER AND MEDIAN SANCTIONS

	Total		Juvenile		Adult	
	N	Med	N	Med	N	Med
Homicide	2	33	1	---	1	---
VPD, F	8	1	2	1	6	---
Assault, F	12	1	4	2	8	1
Sex Off., F	8	1	4	1	4	1
Robbery	52	33	20	33	32	33
Drugs, F	103	4	19	1	84	6
Fraud, F	4	1	0	---	4	1
Assault, M	46	6	23	26	23	6
Forgery, F	26	26	11	26	15	1
Auto Theft	105	26	84	26	21	1
Theft, F	38	1	23	26	15	1
Burglary, F	176	12	132	26	44	1
Fraud, M	15	1	0	---	15	1
Sex Off., M	43	7	4	33	39	6
Burglary, M	8	2	7	2	1	---
Weapons	39	12	8	2	31	12
Theft, M	209	12	129	26	80	6
Liquor, M	143	3	52	12	91	3
Dis. Cond., M	340	6	58	6	282	6
Gambling	7	1	0	---	7	1
Incor-Runaway, SO	104	26	104	26	0	---
Vagrancy, M	46	3	12	1	34	3
Truancy, SO	5	38	5	38	0	---
<i>Not in BJS-WF Scale</i>						
Traffic	1101	6	266	3	834	6

TABLE 7B. RACINE POLICE CONTACT TYPES AND MEDIAN OF THE RACINE SEVERITY OF SANCTIONS SCALE (2-75)

NUMBER AND MEDIAN SANCTIONS

	Total		Juvenile		Adult	
	N	Med	N	Med	N	Med
Homicide	2	33	1	---	1	---
VPD, F	1	---	1	---	0	---
Assault, F	6	36	3	33	3	34
Sex Off., F	4	46	2	68	2	25
Robbery	36	36	18	33	18	58
Drugs, F	54	33	9	26	45	33
Fraud, F	2	12	0	---	2	12
Assault, M	30	26	18	33	12	13
Forgery, F	18	33	11	26	7	46
Auto Theft	84	33	73	33	11	34
Theft, F	19	30	14	30	5	12
Burglary, F	141	26	116	26	25	12
Fraud, M	7	6	0	---	7	6
Sex Off., M	28	13	4	33	24	12
Burglary, M	5	26	4	26	1	---
Weapons	25	26	5	26	20	23
Theft, M	164	26	98	26	66	6
Liquor, M	105	6	38	17	67	6
Dis. Cond., M	273	6	43	26	230	6
Gambling	3	3	0	---	3	3
Incor-Runaway, SO	83	26	83	26	0	---
Vagrancy, M	28	6	5	33	23	3
Truancy, SO	5	38	5	38	0	---
			<i>Not in BJS-WF Scale</i>			
Traffic	968	6	236	6	731	6

especially effective way to consider the relationship. For this reason the modal category was not included in Tables 7A and 7B. When the severity of sanctions scale did not include dismissals the modal categories center around the middle of the severity of sanctions scale. The same problems persist in this case as in the first instance (dismissals included) and resulted in multi-modal categories for almost one-third of the contact types. Whether dismissals are or are not included, nothing can be inferred about modal category from the seriousness level rank of a particular contact type.

The median category of severity of sanction when dismissals are included (1-75) shows little relationship to the ranked seriousness of offense. When the Racine severity of sanctions scale does not include dismissals, however, a more or less discernible pattern of increasing severity of sanction as offense seriousness increases does emerge for adults.

To determine the relationship between the seriousness ranking of BJS-WF Approaches 1 and 2 and the Racine severity of sanctions scale, Spearman's Rho, a standardized index of the strength of a monotonic relationship between two variables, was used (Table 8). The first correlation (.095) was based on the seriousness scale of BJS-WF Approach 1 (shown in Table 3). The second correlation was based on BJS-WF Approach 1 but with dismissals eliminated from the sanction scale. When this was done, the correlation rose to .351. In both of these instances offense seriousness and severity of sanction are positively correlated.

When the rank of contact seriousness derived from the implementation of BJS-WF Approach 2 was used with the severity of sanctions scale 1-75 which

TABLE 8. CORRELATIONS BETWEEN LEVEL OF SERIOUSNESS OF CONTACT TYPES AND SEVERITY OF SANCTIONS**

RACSCALE	BJS Approach 1		BJS Approach 2		BJS Approach 2*	
	Rho	Tau	Rho	Tau	Rho	Tau
1-75	.095	.079	-.065	-.051	.087	.074
2-75	.351	.269	-.203	-.158	.348	.268

* BJS Approach 2* is the same as BJS Approach 2 without traffic contacts included.

** All correlations are significant at the .001 level or higher.

includes dismissals, the results were surprising. The two variables, seriousness of contact type and severity of sanctions, were found to be inversely related with a negative correlation of $-.065$. The same correlation using Racine severity of sanctions scale 2-75 which does not include dismissals produced a correlation coefficient of $-.203$. The switch in the relationship between seriousness of contact and severity of sanction (from positive/direct to negative/inverse) may be explained by the fact that the Traffic contact type is included in BJS-WF Approach 2 and is ranked at the fourth most serious contact type level (Table 3). Although Traffic is both in public opinion and legally considered to be a "less serious" offense and the type of sanctions generally received reflects this appraisal, the ranking of traffic offenses using the BJS-WF Approach 2 was based on only one incident, item 19.5. Unfortunately, item 19.5 was reckless driving with a resultant death and, while it can be assumed that the relatively high BJS-WF Scale score of this item was due to the death and not the reckless driving, under Approach 2 it is classified under both types of contact. To determine whether or not the placement of Traffic at the fourth highest rank of seriousness accounts for the change in the direction of the relationship, Approach 2 was modified by eliminating Traffic from the seriousness scale (BJS-WF Approach 2*). With traffic excluded from the BJS-WF Approach 2 ranking of contact types, the correlation (including dismissals on the severity of sanctions scale), is $.087$. When dismissals are eliminated, the correlation increases to $.348$.

Spearman's Rho allows for a conclusion about the strength of the monotonic relationship between the two variables but does not imply anything about the linearity of the relationship. To measure the strength of the category-rank linear relationships between seriousness and severity of sanctions, Kendall's Tau was used. (It is to be expected that the relationship may be somewhat attenuated because number of categories of seriousness does not equal number of severity ranks.) When BJS-WF Approach 1 was used as a measure of seriousness and the sanction scale included dismissals, $\text{Tau B} = .079$. Without dismissals Tau B increased to $.269$. When BJS-WF Approach 2 was used there was a negative correlation equal to $-.051$ with dismissals included, and a correlation of $-.158$ when dismissals were not included. When the modified BJS-WF Approach 2* is used the relationship changes direction and becomes positive once more. As before, there is a weak relationship when the correlation is done with dismissals included in the sanction scale, $\text{Tau B} = .074$, and a

somewhat stronger relationship when dismissals are excluded, Tau B = .268

Table 8).

Summary and Conclusion

In conclusion, there is evidence of a fairly strong, positive relationship between the survey approach (BJS-WF Scale) and the legalistic approach (Racine Scale) to the scaling of offense seriousness (Tau B = .592). This may indicate some agreement between the popular opinion of contact seriousness and the legal system appraisal of seriousness even given a certain lag problem between changing popular "moral" standards and their implementation through the legal system.

When the relationship between peoples' view of seriousness and a rank-order of severity of sanctions was considered, evidence of a relationship was not as apparent and depended to some extent on the definition of the two variables, 1) rank seriousness of contact types and 2) severity of sanctions.

Peoples' view of seriousness was represented by a translation of the BJS-WF Scale of offense items by seriousness into two new rankings (BJS-WF Approaches 1 and 2) of the Racine police contact types. A third approach, BJS-WF Approach 2* without Traffic contact type was also used to represent seriousness. The rank-order of severity of sanctions was based on the sanctions associated with offenses committed by the members of the three cohorts of the Racine data who were sanctioned, both with and without dismissals.

When BJS-WF Approach 1 was used there was a positive, although not particularly strong, relationship between seriousness of offenses and severity of sanctions, whether or not dismissals were included. When BJS-WF Approach 2 was used, seriousness and severity of sanctions were negatively correlated. In a search for an explanation of the change in the direction of the relationship (from positive to negative correlation), BJS-WF Approach 2* to seriousness, when correlated with severity of sanctions scale, did yield a positive relationship, and this relationship exhibited only slightly less strength than that found between BJS-WF Approach 1 and severity of sanctions (Table 8). In summary, when all three correlations are considered there is evidence of moderate-to-weak relationship between peoples' view of the seriousness of criminal offenses and the official responses of the justice system to criminal offenses.

All of this suggests that additional research on the factors related to decision-making in the justice system must precede and be a part of any attempt to understand the effectiveness of sanctions as now administered by the courts.



SCIENCE EDUCATION SEMINAR

DR. TONY HEITING
State Science Consultant
Des Moines, Iowa

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Refreshments at 3:30 p.m.

Discussion at 3:45 p.m.

Wednesday, April 11, 1990